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ABSTRACT

This publication provides a comprehensive inventory of initiatives undertaken by European institutions and international organizations to assist the transformation of higher education and research in East Central Europe. Section 1 contains five papers, each highlighting one of five institutions that have developed innovative approaches to address problems facing higher education and research communities in East Central Europe. Paper titles are: "Harnessing Higher Education to Change: The TEMPUS Scheme in Central and Eastern Europe" (Roger Absalom); "The European Science Foundation" (W. Shauinger-Horne); "The European Cultural Foundation and Higher Education Initiatives in Eastern and Central Europe" (Odile Chenal); "Opening Up the Centre: A Brief Review of the Central European University and the Soros Foundation Network" (Paul Flather); "Transformation of the National Higher Education and Research Systems of Central Europe: A Program at the Institute for Human Sciences" (Aaron A. Rhodes). Section 2 highlights institutions in Western and Eastern Central Europe that are working to increase east-west exchange and provide support for reform. Section 3 describes east-west university linkages beyond the TEMPUS (Trans-European Mobility Programme for University Students) Program which dominates the scene. Section 4 looks at Canadian programs in East Central Europe. Section 5 is a bibliography containing over 240 references published from 1991 to 1993. Section 6, an appendix, contains descriptions of European Union Initiatives to support cooperation in science and technology with the countries of central and Eastern Europe and in the New Independent States. (JB)

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Education

Continental Responsibility

European and International Support for Higher Education and Research in East Central Europe

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INTRODUCTION

MARY E. KIRK

Since 1989, West European governments and the European Union have embarked on a wide array of programs to support the transition to market economies and democratic institutions in East Central Europe (ECE).[1] A substantial portion of that aid has been devoted to new cooperative exchange and training programs at universities and research institutions, because of their importance as instruments in the region's economic, political and social development. At the same time, nongovernmental organizations, foundations and universities in Western Europe have expanded their cooperation with their counterparts in East Central Europe. To date, however, only limited steps have been taken to catalog those linkages and related institutional reforms in the region.

The aim of this publication is simple and straightforward: to provide a comprehensive inventory of initiatives undertaken by European institutions and international organizations to assist the transformation of higher education and research in East Central Europe. We believe that such a study is a critical step toward measuring the impact of those programs and will be of benefit to funders, policy makers and cooperating academic communities in Europe and abroad. That assessment is particularly relevant now, given the impetus in both Europe and North America to use available resources to establish analogous programs in the former Soviet Union.

This publication is the outgrowth of independent initiatives of two institutions, the Institute for Human Sciences and the Institute of International Education, both of which have a long history of involvement with East Central Europe.

The Institute for Human Sciences (Institut für die Wissenschaften vom Menschen—IWM), located in

[1] East Central Europe is defined, for purposes of this report, as the region that includes Albania, Bosnia, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Macedonia, Romania, Slovakia, Slovenia and Yugoslavia.

Vienna, initiated several pilot projects in 1991 to promote structural reform in higher education. Its research and policy analysis project, "The Transformation of the National Higher Education and Research Systems of Central Europe (TERC)," is guided by an Expert Committee under the chairmanship of Lord Dahrendorf and is supported by the European Union and several European and U.S. foundations. (An overview of the IWM TERC project is found in Aaron Rhodes' article in Section I.) The present publication is part of the IWM's ongoing effort to establish an inventory of the present situation at higher education institutions, document the progress of reforms through publications and empirical studies and initiate catalytic projects in the region. IWM's director, Professor Krzysztof Michalski, a member of the Expert Committee, identified as an early priority the identification of assistance and reform initiatives in the region.

The New York-based Institute of International Education, which opened a field office in Budapest in 1990, undertook research for this report as part of its East Central Europe Information Exchange, initiated in 1991 with funding from the Ford Foundation. IIE's Information Exchange serves the higher education, philanthropic and public policy communities in the United States and East Central Europe by collecting and disseminating information on exchange and training programs, identifying issues of concern to universities and other institutions and tracking trends in financial resources available to support university-based initiatives. In 1992, the Information Exchange published *Where Walls Once Stood: U.S. Responses to New Opportunities for Academic Cooperation with East Central Europe*, by Mary E. Kirk. The publication recommended that the next initiative of the Information Exchange be an analysis of intra-European programs and assistance measures. With support from the Pew Charitable Trusts and the Andrew W. Mellon Foundation, the Information Exchange is currently developing an inventory and commissioning case studies of training programs relating to democratization and the rule of law in East Central Europe.

IWM and IIE undertook this study for three primary audiences:

- **the East Central European academic community**. It is hoped that they will benefit from a wider dissemination of information about available opportunities, funding and other resources for implementing reforms at the institutional, national or regional levels. While the editors have not intended to produce a comprehensive "grants guide," the preliminary overview of activities in the region may call attention to real opportunities for support and collaboration with new partners, both in East Central Europe and beyond. Another aim is to elicit their observations on important areas of educational reform or development that need further attention and can benefit from international cooperation.

- **higher education institutions, policy makers and funders in Western Europe**. We hope that further discussion and cooperation in programs with complementary objectives will enhance the effectiveness of the overall assistance effort and avoid unnecessary overlaps.

- **universities and potential collaborators in North America**. Many American and Canadian observers have viewed the rapid implementation of initiatives undertaken by the European Union and individual West European countries with some envy. Others have noted, however, a growing "parochialism" in both the North American and European approaches to academic cooperation. As U.S. interests, in particular, turn increasingly to economic integration in the Western hemisphere, U.S. funders and potential collaborators may be content to "leave Europe to the Europeans." We hope to provide a foundation for more productive multilateral partnerships in areas where such cooperation will have the greatest impact.

OVERVIEW OF THE IWM–IIE STUDY

Perspectives

The original focus for this publication was higher education reform in East Central Europe and international measures to support it. The many and diverse modes of West European engagement with the region, however, pointed to the benefit of developing a compendium of the full range of cooperative academic and training programs sponsored by national governments and private institutions. While

such programs support joint research, individual mobility grants or professional training, they also ultimately aim to enrich the intellectual opportunities of individual scholars and students—the academic milieu, in short—and therefore have an important impact on institutional reforms throughout the region, as well.

The publication first highlights five institutions that have developed innovative approaches to address the problems facing the higher education and research communities in East Central Europe. Of the key international efforts to advance structural reform on a regional level, we believe that they deserve particular attention and are featured in introductory articles.

The **European Union's Tempus Program**, launched in 1990, aims to develop the higher education systems of eligible East Central European countries through international cooperation. It is particularly notable for its "bottom up" approach, by which eligible countries in East Central Europe decide which portion of the EU's PHARE budget should be set aside for development of the university sector. National Tempus committees in the eligible countries also help to decide subject priorities on an annual basis. The Tempus Program has rapidly implemented a large number of Joint European Projects (currently over 700) covering a broad spectrum of specializations, from engineering to linguistics. This approach is considerably different from comparable U.S. government programs—or programs implemented in several European countries—because it is designed to ease the transition to market economies or democratic programs through the mechanism of university development. Roger Absalom reviews the program's background and current activities in Section I.

The **Soros Foundation Network** and the **Central European University** have played a unique and expanding role in the development of intellectual capital in the region over the last decade. Drawing graduate students from around the region to its campuses in Budapest, Prague and, most recently, Warsaw, CEU draws on indigenous and international faculty and stresses advanced training in the social sciences and humanities. Paul Flather's article explains the philosophy behind the Soros approach to educational reform—emphasizing regional cooperation and providing new models for curricula, especially in the social sciences and policy-related fields—as well as the structure and activities of the CEU and its many affiliated institutions.

The **European Science Foundation**, founded twenty years ago to advance European cooperation in the natural sciences, now accepts East Central European scientific institutions as full members. The ESF aims to uphold the quality of scientific research in East Central Europe through a number of integrated measures. The ESF network of institutions provides a unique forum for discussing measures to maintain the standards of East European science and develop its relations to industry.

The **European Cultural Foundation** serves as the center for an important network of independent institutes throughout West Europe whose involvement with East Central Europe has grown rapidly. These institutions work in a variety of research and cultural fields and represent different modes of cooperation, including technical assistance, publications and information dissemination (particularly in the foundation and nonprofit fields). It has also played a leading role in managing the Erasmus Program and was the first administrator of the Tempus Program.

The **Institute for Human Sciences** has initiated an integrated program to assist the reform of the higher education sector in Hungary, Poland and the Czech and Slovak Republics. With assistance from the European Union and several U.S. and German foundations, the IWM's TERC project has commissioned empirical studies of structural reform to date, convened several international conferences and public meetings on the subject, and launched the "European Chair Program" and the "Hannah Arendt Prize."

Programs and Connections

Institutions in both Western and East Central Europe that are working in a variety of ways to increase East–West exchange and provide support for reform are highlighted in Section II.

A number of **international organizations** have focused on higher educational reform in the region. OECD has undertaken a wide array of research projects and related conferences concerning the funding and structure of ECE university and research establish-

ments, while the World Bank has implemented human resource projects benefiting higher education development in several countries. Other organizations, for instance UNESCO and NATO, are supporting the integration of European research networks and information systems on higher education.

In addition, many **European institutions** and organizations—ranging from the European Union to informal university working groups—have embarked on ambitious programs to support cooperation with East Central Europe.

Many **individual European countries** have a long history of cooperation with East Central Europe and have intensified those efforts since 1989. Among the most noteworthy long-term engagements are those of the United Kingdom, the Netherlands and Austria, which for a number of years have had strong state-funded scholarship programs and research support schemes. These have been augmented by state programs emphasizing the development of democratic institutions and market economies; the most notable and extensive include the U.K.'s Know-How Fund, the Netherlands' Passage program and Denmark's Danish Democracy Fund, all of which have a higher education development component. Other countries featured in this report have increased scholarship and university partnership schemes to support cooperation with the region in academic and scientific research or study; France and Austria are notable in this respect. While most programs are regional in scope, some support activities with particular countries or groups of countries—for example the Nordic–Baltic Scholarship Scheme and Ausiria's "Action Programs" with Hungary, Slovakia and the Czech Republic.

Scientific and research institutions in Germany have implemented a significant number of cooperative research and scholarship programs—perhaps the largest group of contacts of any European country. A remarkable feature of that achievement is that it does not appear to be guided or directed by the German federal government. Although most of the institutions featured in this report are largely state-funded, they have independently established policies seeking further cooperation with or support for the East Central European university and research communities. Given the substantial resources of the German academic establishment, we strongly recommend the publication of a comprehensive guide to grants and support available from those institutions.

Academic associations and nongovernmental organizations in East Central Europe have also played an increasingly important role in supporting higher education reform and institutional developments, either independently or in cooperation with West European partners. This is an encouraging and important development that Western collaborators should use to full advantage.

Rectors Conferences now operate in most countries, offering a new forum and institutional framework for discussing transformations in higher education policy.

The Cyril and Methodius Foundation, the Jan Hus Educational Foundation and the Slovak Academic Information Agency provide mobility grants for individuals and financial support for institutions in the region. Several independent academic institutions offer curricula and educational opportunities for students and faculty, among them the American University in Bulgaria, the New Bulgarian University, Collegium Budapest, the Invisible College (Budapest) and Academia Istrapolitana (Bratislava). The Croatian Association for Social Sciences and Humanities is actively seeking to increase the international dimension of Croatian scholarship through conferences, lectures and publications. Studies on the reform of higher education are carried out by a number of regional research centers, including the Hungarian Institute for Higher Education Research, the Center for Higher Education Studies in Prague and the Center for Science Policy and Higher Education in Warsaw. (Similar activities associated with the Soros foundation network are highlighted in Paul Flather's article in Section I.)

University Linkages

Undoubtedly, the European Union's Tempus Program has transformed the map of East-West university linkages. Nevertheless, a 1993 survey of member institutions of the Standing Conference of European Rectors (CRE) undertaken for this publication found a large and diverse number of **East–West university linkages outside of the Tempus Program**.

Two hundred fifty-seven West European institutions returned surveys on over 1,400 distinct programs with East Central European partners. German universities represent the largest country group (73), followed by the United Kingdom (38) and France (33). The survey reveals a considerable concentration of activity in the "northern tier" countries, with Poland, Hungary and the Czech Republic attracting the largest number of foreign partnerships. Much activity appears to take place in capital cities: in the Czech Republic, for example, two-thirds of the programs take place in Prague, one-third with Charles University alone. That pattern follows in all of the other countries except Poland where the considerable diffusion of activity to regional universities may be partially accounted for by Poland's size and comparatively long history of cooperation with West European partners.

More than half of the programs reported to CRE were initiated since 1990. German institutions reported the highest number of programs operating prior to 1990 (165 in all), followed by the United Kingdom (50) and France (45). The first Netherlands interuniversity agreement reported in the CRE survey was signed from 1957, while the first German and U.K. university links date from 1959.

It should be noted that recent studies of U.S. and Canadian university linkages found similar patterns of cooperation at the university level. In its 1992 study, IIE found a high percentage of U.S. university-sponsored programs taking place in capital cities of the "northern tier" countries of East Central Europe. An emphasis of U.S. government and private funders on the democratization and the development of market economies after 1989 accounted for a large number of university linkages in management or economics (often short-term training programs) and professional fields, particularly law. (In intra-European exchanges, however, academic fields remain dominant.) While joint research exchanges continued to comprise an important portion of the U.S.–ECE linkages, U.S. universities found it increasingly difficult to acquire funds to support faculty and student exchanges in basic fields of research. West European universities have utilized a variety of state and university-based funding mechanisms to carry out research projects and exchanges with their East Central European counterparts.

University exchanges between Canada and East Central Europe have emerged as important instruments of the Canadian assistance program for the region. In addition to stimulating new joint research programs, particularly with the Czech Republic, Slovakia, Poland and Hungary, the political events in East Central Europe have prompted a number of government-funded assistance programs using Canadian universities' expertise and experience.

CONCLUSIONS

Many observers of the East Central European scene have noted the chaotic and overlapping quality of the assistance measures and joint projects initiated since 1989. Certainly many programs with similar if not identical objectives are running concurrently, and there has been little effort to date to coordinate efforts among European instititutions. This is sometimes seen as an obstacle, especially by East Central European colleagues accustomed to operating within monolithic or hierarchical structures of authority during the Communist era. The myriad program models and initiatives undertaken in the last four years should perhaps be seen in a more positive light, however, for in fact they represent pluralism, internationalization and a multiplicity of sources of authority—important qualities for the development of democratic societies. The programs represented in this study have undoubtedly brought more opportunity, diversity and a broader texture of academic programs to the East Central European institutions involved.

A question inevitably arises, however, concerning the absorption of these programs and assistance measures in East Central Europe. Many programs have been introduced by West European or international institutions without sufficient input from the "receiving side." Other initiatives are not "demand-led" and impose many obligations on East Central European partners to meet the needs of the Western funder or sponsor. Many university representatives in East Central Europe have remarked on the amount of valuable time lost to West European or North American visitors, often for initiatives that never come to fruition. The programs having the most impact are those that are truly two-sided; Western institutions must be encouraged to view their counterparts as equal partners, and the East Central

European representatives should be encouraged to express their opinions more forcefully.

Two major studies have now been undertaken on East–West academic linkages: the current publication; and *Where Walls Once Stood*, IIE's report on U.S.–East Central Europe exchanges. A number of other related articles have appeared in European and U.S. journals in the last several years. East Central European universities have worked with many different partners and at least two different models of higher education development—the U.S. and the European. Both the West European and North American systems have important qualities to offer to East Central Europe in the period of transition in higher education. It is hoped that all three sides will work together to develop higher education structures in East Central Europe that can adapt to both systems and be sufficiently flexible to take the best qualities of each, so that close cooperation with U.S. institutions will enhance partnerships with European institutions.

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Although IIE and IWM have attempted to make this report as complete and timely as possible, we understand that the dynamic nature of the many initiatives currently being undertaken in the region makes it difficult to present a comprehensive and exhaustive account. We hope that this publication will be a useful record of many of the most important programs that have been introduced over the past few years. We welcome information from readers on new programs in East Central Europe for inclusion in later reports.

—May, 1994

Mary E. Kirk is the Institute of International Education's Regional Director for East Central Europe and the Newly Independent States.

Harnessing Higher Education to Change: The TEMPUS Scheme in Central and Eastern Europe

ROGER ABSALOM

THE ORIGINS OF THE TEMPUS SCHEME

The events of 1989 and 1990 in Central and Eastern Europe had a dramatic impact on the European Union, which found itself facing unprecedented political and economic challenges to its established philosophy and procedures in external relations. Also, there was the urgency of making an appropriately rapid and effective response to these challenges, not only in terms of emergency assistance but also by providing concrete ways for the countries concerned to develop new perspectives and new goals linked to a meaningful concept of Europe.

Aiming for an integrated global response, the Union quickly sought to provide a comprehensive framework for the provision of practical assistance and expertise to help the countries concerned restructure their economies and political systems, to maximise the benefits they might derive from the new situation. This overall programme of assistance, agreed to by the Council of Ministers in December 1989, was called **PHARE.**[1]

The aim of PHARE was to work with the countries of Central and Eastern Europe to establish priorities and provide the funding for economic restructuring. Higher education and training had been identified by the eligible countries themselves as one of the priorities for cooperation, not because they believed action to ameliorate higher education could have any immediate and dramatic impact upon their political and economic situation, but rather because it represented a highly salient joint investment in the future of the whole continent's intellectual resources. Thus, from a very early stage, a number of specialised programmes of assistance in the education field were embedded within PHARE, the largest by far being the **Trans-European Mobility Scheme for University Studies (TEMPUS).**

In December 1989 the Council of Ministers also requested the European Commission to present detailed pro-

posals, to be effected within the PHARE framework, for appropriate measures in the field of higher education and training to support the reform process in Central and Eastern Europe. In January 1990 the Commission submitted to the European Council and Parliament its plans to create a new programme specifically designed to meet the distinctive needs of the area concerned. Though drawing considerably upon the experience acquired by existing European Union education programmes such as ERASMUS, COMETT and LINGUA, these proposals nevertheless sought to address these specific needs directly, rather than simply attempting to open the existing intra-Union programmes to the Central and Eastern European countries eligible for assistance under the TEMPUS Scheme. Underlying the decision to establish the TEMPUS Scheme as a separate operation was the perception that it was essential, in managing the reform process, to intervene in the social dimension specific to the countries concerned, because inducing change in the outlook and attitudes of those engaged as teachers or students in higher education would be a critical factor in enhancing the availability of the human resources available to forward the reform process itself.

It was not simply a question of improving the training of future managers, scientists and engineers, although that would clearly be an important ingredient. Above all it was recognised that, through the amelioration of the structures and philosophy of education, a vital contribution could be made to overcoming resistance to needed change throughout civil society, helping to form more relevant knowledge, techniques and skills, and above all replacing old ways of thinking with new ones.

Initially TEMPUS was a response to the specific training needs of Poland and Hungary. However, it was clear from the beginning that TEMPUS would also have to be flexible enough to cover additional countries as soon as their inclusion in the PHARE programme was decided. Thus, in 1990 economic assistance was extended to the former Czechoslovakia and, for one year, the former German Democratic Republic. In 1991 Bulgaria, the former Yugoslavia and Romania were all also able to benefit from TEMPUS. And in 1992 four additional countries had become eligible for TEMPUS: Albania, Estonia, Latvia and Lithuania. Since then the tragic situation in the former Yugoslavia has affected participation by all of the successor Republics, except Slovenia, which is the only one currently eligible for the TEMPUS Scheme; it is to be devoutly hoped that this will not be a long-term development.

HOW THE TEMPUS SCHEME OPERATES: INFORMATION AND PROJECT STRUCTURES

The objective of TEMPUS—to promote the quality and support the development of the higher education systems in the countries designated as eligible for economic aid under PHARE by encouraging their constructive interaction with partners in the European Union—is addressed by providing support for cooperation initiatives designed and implemented on the ground by transnational groups of teachers and trainers, often making use of existing networks as a springboard.[2]

Attainment of the objective of promoting constructive interaction in the development of human resources in the higher education sector of the eligible countries depends upon the users having the necessary "tools for the job." The information policy adopted and the information materials provided are therefore critical factors in the process whereby well-formed applications are received for viable projects.[3]

The main vehicle for cooperation initiatives is the **Joint European Project (JEP),** involving the participation of at least one university from an eligible country and of partner organisations, of which one must be a university, in at least two EU Member States. The range of activities eligible for grant support can be summarised as follows:

- cooperative education and training actions, such as continuing education and training schemes, open and distance learning and short intensive programmes;
- structural development of higher education by activities such as curriculum development and upgrading of facilities;
- development of universities' capacities to cooperate with industry by activities such as staff exchange with industry, establishment of facilitating service structures, and the provision of consultancy advice by universities to enterprises;
- student mobility for study and teacher mobility for teaching, study or retraining;

- regional activities involving cooperative/training actions and the creation/updating of facilities to deal with problems common to two or more eligible countries.

In parallel with this support within JEPs, Individual Mobility Grants (IMGs) for staff[4] (teaching assignments, practical placements, staff retraining and updating and visits) are provided for, and some support is also available for activities arising from the extension to the eligible countries of European associations in higher education, for publications and other information activities directly related to the TEMPUS Programme, and for surveys and studies intended to assist in its monitoring and evaluation. Additionally, there is a provision for limited support for youth exchanges and related activities.

Although the intended transfer of resources is always from the European Union to the eligible countries, it should never be forgotten that TEMPUS is a two-way street. By addressing the problems of change in the higher education systems of the eligible countries, the partner institutions and organisations in the European Union also change themselves. TEMPUS helps to restore communication between scholars and scientists, to the evident benefit of all parties. Moreover, when the partners in JEP networks work together, thinking through the problems of what to teach and how to teach it, and when they mobilise their resources to meet the problems and needs of higher education in the eligible countries, the benefit also flows in both directions.

PROGRESS TO DATE

Since May 1990 there have been three selections of Projects targeted to meet the specific needs of Central and Eastern Europe within the framework outlined above. It should be stressed that, although the Commission has the final responsibility for the implementation of the Scheme, the national authorities of the eligible countries set the specific priorities for their countries in terms of subject areas and allocation of funds for TEMPUS within their total PHARE budget, and participate in every stage of the selection as co-decision makers. The total budget available for 1990 was 23.16 MECU (1 MECU = 1 million European Currency Units [ECU]), and for 1991 it amounted to an additional 70.5 MECU, (including 15 MECU for JEPs of a regional character to be supported from the PHARE regional facility).[5] In 1992 the available budget totalled 98.3 MECU. The total funds allocated to projects under the TEMPUS Programme between its inception in July 1990 and the completion of the selection round in 1992 amounted to 191.96 MECU.

For projects planned to start operating in the academic year 1992/1993, a total of 1,979 applications were received by the deadlines of 31 January 1992 for cooperation activities with Bulgaria, Czechoslovakia, Hungary, Poland, Romania and Slovenia, and 29 February 1992 for Albania, Estonia, Latvia and Lithuania.[6] Of all new applications received for projects starting in 1992, 234 (11.8%) were selected for support. These applications included 178 for Mobility JEPs,[7] 30 of which were supported.

Additionally, of the 153 projects supported in 1990, 134 submitted renewal applications. The Commission continued support to 127 of these projects. Of the 319 new projects supported in 1991, all submitted renewal applications and the Commission continued support to 274 of them. This brings the total of JEPs currently in progress to 635.

This means an average of 120,070 ECU[8] per new project supported (67,888 ECU for the preparation and implementation of JEPs and 52,182 ECU to cover the mobility costs of students and teachers participating in them), 178,517 ECU per 1990/91 renewal project embarking on its third year of activities (87,779 ECU on average for implementation and 90,738 ECU for mobility), and 147,442 ECU per 1991/92 renewal project embarking on its second year of activities (79,877 ECU on average for implementation and 67,565 ECU for mobility).

Although the overall budget for 1992/93 was increased by 36.2%, the necessity to continue funding the successful projects approved in 1990/91 and 1991/92 inevitably reduced the scope for supporting new projects starting in 1992/93. The basis for the selection of these projects was the concern, within the budget available, to give sufficient financial support to projects chosen (11.8% of the total number of applications received, compared to 22.7% in 1991) to be able to carry out their proposed activities, thus remaining in line with the overall aims of the TEMPUS Scheme to support the development of the higher education systems in the eligible countries and the priorities for funding established by these countries.

The bulk of the 234 new JEPs proposed for support were in the priority subjects specified by the eligible countries, notably in engineering and applied science subjects (55, or 23.5%), in business management (40, or 17.1%), environmental protection (24, or 10.3%) and medical sciences (21, or 9.0%). Some 20% of the projects were nevertheless in nonpriority areas considered to be relevant by the eligible countries, particularly teacher training and natural sciences.

The countries currently eligible participated in the new projects, including regional projects, in the following proportions: Albania 3.4%, Bulgaria 14.5%, Czechoslovakia 13.2%, Estonia 3.4%, Hungary 10.3%, Latvia 4.7%, Lithuania 4.7%, Poland 42.7%, Romania 13.2%, Slovenia 8.5%. Altogether 1,784 institutions were involved, and totals of 6,405 students and 9,913 teachers were enabled to travel to higher education institutions abroad for purposes of study, retraining or updating, and teaching assignments. The value of the personal contacts that are built up during the periods abroad cannot be overestimated as a means of improving mutual understanding.

Alongside the mobility of teachers within JEPs, a considerable number of individual teachers have been awarded IMGs over the first three years of the programme. It is estimated that under this provision of the TEMPUS Scheme a total of 2,379 staff members from the eligible countries will have undertaken updating, teaching and exploratory visits in the European Union between 1990 and the end of the academic year 1992/93. The total funds required to finance this mobility for individual teachers amounted, between 1990 and the end of the academic year 1992/93 to 6,285,878 ECU.

During the same period the Commission also awarded support to 1,548 staff members from European Union countries wishing to visit the eligible countries for various approved purposes, including individual teaching assignments, at a total cost of 1,002,403 ECU.[9]

Similarly a total of 845,300 ECU was awarded between 1991 and 1992/93 for 156 Complementary Measures projects to enable the completion of a limited number of specific projects submitted by associations of universities for publications and for studies and surveys that fulfil the aims of TEMPUS.[10]

A number of Youth Exchange projects, intended to benefit young people not participating in higher education, were also supported during the period concerned.

A total of 235 grants for the preparation and implementation of Youth Exchanges were made in the period between 1991 and the end of academic year 1992/93, for a total value of 782,799 ECU.[11]

ACHIEVEMENTS OF TEMPUS TO DATE

Among qualitative indicators of positive trends brought about by JEPs are those related to the restructuring of the higher education system that provide a direct response to human resources development needs in the field of industry, environmental protection and internationalisation of commercial contacts.

One of the most salient indicators of the impact of TEMPUS concerns the upgrading of facilities, at both departmental and institutional levels. This upgrading, depending on the physical state of the higher education institutions involved, covers a wide spectrum of outcomes, and has shown a clear evolution during the running of the programme. Two main types of equipment may be provided: administrative and communication equipment on the one hand and scientific equipment on the other.

Administrative and communication equipment have an immediate effect and cover facilities such as fax machines, photocopiers, PCs, text processing software, etc. In the first year of the participation of any eligible country, a considerable investment is made for this purpose. Although not directly linked to project activities, this equipment may prove to be vital for the success of a project, because communication between the partners and the management of the project on the ground largely depends on the availability of these facilities.

Scientific equipment mainly concerns modern information processing systems (such as computers, computer assisted equipment, etc.) and is directly related to the project activities themselves. This type of equipment also supports other actions within the TEMPUS framework, particularly curriculum development.

A characteristic of the long period of isolation experienced by many of the higher education institutions in Central and Eastern Europe is the lack of up-to-date specialist literature in many disciplines. Given the especially difficult position of social sciences under the previous regimes in many of the countries, the opportunity provided by TEMPUS to catch up with the latest

developments abroad was felt as particularly valuable. Thus, in many disciplines, upgrading of libraries and provision of access to specific periodicals brought a very concrete improvement to the situation.

The technical upgrading of existing language laboratories, or purchase of new ones, was also an integrated part of many projects in different subject areas. Although specialised language studies already existed at a high level in many eligible countries, professionals and students in other disciplines such as engineering, medicine or agriculture often lacked sufficient knowledge of foreign languages for international cooperation to be effective. Much effort was therefore invested in the updating of participants' knowledge of foreign languages, benefiting both staff and students.

The major contribution of TEMPUS to the restructuring of higher education in the eligible countries undoubtedly falls, however, within curriculum and teaching materials development. The reason for this is that development in these fields leads to a shift away from the overtheoretical and overspecialised approach to higher education adopted previously, which left its graduates unable to respond flexibly to changes taking place in society. The development of curricula and teaching materials based on the best practices of the higher education systems in the European Union has led to the creation of new courses and the upgrading of existing ones.

Of great importance in relation to the democratisation of civil society are activities in the field of social and economic sciences, law, European Studies and humanities. Although not all of these areas are considered to have top priority for all of the eligible countries, it is clear that their impact will be felt more and more, since future decision makers are often graduates from such disciplines.

Although not yet developed sufficiently, university-industry cooperation links, involving industry from both the European Union and the eligible countries, are also beginning to appear. The intention of TEMPUS is to contribute to increasing the ability of Central and Eastern European universities to provide the indispensable human resources to respond to the needs of a society in transition. In this respect, education in the field of management and business administration is particularly important in the context of market economy oriented management.

Transnational networking, taken with student and staff mobility, clearly represents one of the most important benefits to the departments and institutions concerned and is particularly important for attitudinal change. By enabling both teachers and students to undertake updating, study and retraining in universities and enterprises in the European Union, these activities make a fundamental contribution to the full re-establishment of the world community of scholars and scientists, while ensuring that the beneficiaries can become aware of new perspectives in the development and application of knowledge, and in their turn, become multipliers of the benefits they receive from such contacts.

Of great interest in this connection is the potential synergy which might derive from a strengthening of linkages between the TEMPUS Scheme and comparable initiatives undertaken by non-European Union countries. One of the provisions of the 1989 Decision on TEMPUS was that the European Commission should be responsible for ensuring coordination with actions in the same field as TEMPUS that are developed by countries that are not members of the Union, including, where appropriate, participation in TEMPUS projects. The countries concerned are the EFTA countries (Austria, Finland, Iceland, Norway, Sweden and Switzerland), the United States, Canada, Japan, Australia, Turkey and New Zealand.

It cannot, unfortunately, be said that this potential benefit to the reform process has yet been adequately developed. In 1992/93 some 17% of all applications received, and the same percentage of those supported, involved organisations in the G24 countries. The main countries participating are Austria, Norway, Sweden, the United States and Finland, although institutions in Canada, Turkey and Switzerland are also present in a small number of projects. Moreover, at the completion of the 1992/93 selection round, 4 of the 234 projects supported (2 submitted from Sweden, 1 from Austria and 1 from Finland), were coordinated by organisations in these countries. The salience in such trans-block cooperation of Austrian, Swedish and Finnish participation reflects the fact that the governments of the countries concerned provided organised counterpart funding at the national level to support the involvement of their institutions in TEMPUS projects, thus underlining the importance of this critical factor in promoting the conditions for synergy.

CURRENT CHALLENGES AND FUTURE PROSPECTS

It will be clear from the foregoing that the European Union has already made a very substantial investment in TEMPUS, giving clear proof of the deep concern felt at the political level by its members that the Scheme should fully achieve its objectives. While TEMPUS is not designed to be a permanent feature of the construction of Europe, and it is hoped that at a certain point in the future its work will be complete, in the medium- to long-term perspective the Scheme is intended to allow all the higher education systems in Central and Eastern Europe to reach the level of resources, both material and human, needed to underpin progress towards preparing new generations of well-trained and qualified young people that will be needed for the next stages of integration into the free world economy.

Within this context, it is evident that for some years to come (and in a number of cases for the foreseeable future), the concept of the TEMPUS Scheme must continue to comprise a large net transfer to the eligible countries of the strategic resources, knowledge and expertise that are essential to the development of their higher education systems and will act as catalysts of wider and deeper societal change.

This is particularly important, in the Commission's thinking, in relation to the proposals now being brought forward concerning the newly-independent States of the former Soviet Union in the second phase of the TEMPUS Scheme, TEMPUS II, which is planned to begin on 1 July 1994. Since these States find themselves in a broadly similar situation with respect to their economic and social reform efforts as the countries already eligible under TEMPUS, the experience acquired during the first three years of the programme's implementation can be put to good use. This experience has been carefully monitored and analysed by means of an external evaluation of the TEMPUS Scheme on operations during the first year of its life.[12]

It is, in conclusion, fair to say that TEMPUS has already clearly demonstrated the possibility of increasing convergence of principles and practice between the European Union and the eligible countries in the realm of higher education development. In particular, the positive results of co-decision making in TEMPUS demonstrate the potential for this form of practical cooperation in other fields of joint work by the Union and its partners in the emerging pattern of cooperation across a transformed continent. In this sense the TEMPUS Scheme could genuinely be a flagship for the long-term objectives of the European Union's external policies, particularly as expressed in the PHARE Programme.

While the TEMPUS Scheme is thus making a significant contribution to political and economic reform and restructuring in the eligible countries, not only by providing material resources at critical points, but also by "letting in fresh air" after half a century of closed windows, the situation of the countries in Central and Eastern Europe that are participating in the Scheme nevertheless today remains almost as great a challenge to the European Union as it was in 1989. Despite all that the eligible countries have already achieved, they are still only at the start of the complex and difficult process of overcoming the negative inheritance of their recent past. They are having to make profound changes in their political, economic and social structures in order to rejoin the free world precisely at a time when the latter is grappling with the effects of a recession and, in the case of the European Union, is distracted by internal dissensions and the difficulties arising from German reunification.

It is fervently hoped that these circumstances will not limit the resources upon which the benefits that the TEMPUS Scheme can bring to higher education in Central and Eastern Europe critically depend. Those in Western higher education, not only within the European Union, able to exert their influence to avoid the risk of "spoiling the ship for a ha'porth of tar," should certainly do so without delay.

SUMMARY

TEMPUS forms part of European Union aid for the economic restructuring of the countries of Central and Eastern Europe, known as PHARE. The objective of TEMPUS is to promote the quality and support the development of the higher education systems in the eligible countries by encouraging their growing interaction with partners in the European Union. The funds allocated to projects under the TEMPUS Programme between July 1990 and the completion of the selection round in 1992 totalled 191.96 MECU. Cooperation activities and mobility of organisations in the European Union currently involve partners in Albania, Bulgaria, Czechoslovakia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia. Under TEMPUS II, beginning 1 July 1994, analogous activities will be extended to successor states of the former Soviet Union.

Analysis of the experience already gained under TEMPUS will be valuable in addressing the needs of the reform process in these States, where many of the problems are analagous to those which initially existed in the countries already eligible.

—*May, 1993*

At the time of writing this article, Roger Absalom was a senior consultant at the EC TEMPUS Bureau. At present, he is an independent researcher and a consultant on academic quality to the Higher Education Funding Council for England.

NOTES

[1]The acronym stands for *"Pologne, Hongrie: Aide à la Réconstruction Economique"*; the French word *phare* means "beacon."

[2]The Task Force Human Resources of the European Commission is responsible for the implementation of the TEMPUS Scheme, being assisted in this task by an autonomous body, the EC TEMPUS Office, set up to act as a Technical Assistance Unit. The Office assists with the design, preparation and distribution of official documentation on TEMPUS; general information on the Scheme; selection and renewal of projects and other activities eligible for support; issue of contracts and payment of grants; preparation of statistics; and publications relating to the activities and impact of the TEMPUS Scheme.

[3]In 1991/92 the EC TEMPUS Office produced and distributed the following information items: 40,000 Vademecums in 9 languages; 3,000 Compendiums; 25,000 leaflets in 9 languages; 8,000 lists of accepted projects; 20,000 Directories of higher education institutions in Central and Eastern Europe; 8,000 copies of the Annual Report for 1990/91.

[4]Under the TEMPUS Programme student mobility takes place only within JEPs.

[5]In PHARE, "regional" cooperation activities are those involving organisations in more than one eligible country.

[6]Because of the political and military situation in former Yugoslavia, only applications relating to Slovenia could be considered.

[7]Mobility JEPs were added in 1992/93 to the range of eligible project-types: They are designed specifically to accommodate large flows of students, mainly from the eligible countries to Member States; mobility of course remains possible within normal (structural) JEPs in addition to the other activities eligible under them.

[8]In January 1993, 1 ECU = US $1.21. Average JEP support per new project = US $145,285.

[9]Between 1990 and the end of the academic year 1991/92, a total of 2,037 students from eligible countries and 287 students from Member States of the European Union also received IMGs, for total values, respectively, of 7,284,845 ECU and 163,120 ECU. From 1992/93, IMGs were no longer available to students, since all such mobility was organised within JEPs.

[10]"Complementary Measures" association and information activities eligible for support under the TEMPUS Scheme normally have a professional/sectorial basis rather than a geographical one (e.g., a transnational newsletter on engineering education rather than one on education opportunities in a wide range of subjects in a particular region of one Member State of the European Union).

[11]In 1990/91, a total of approximately 1,000,000 ECU was awarded to CME and Youth Exchange projects taken together, after which the funding was separated as shown.

[12]The monitoring and evaluation process is continuous, being effected by an intensive programme of site visits to ongoing JEPs that involve academic experts from both the European Union and the eligible countries, as well as officials of the Commission and by administrators from the EC TEMPUS Office and the National TEMPUS Offices.

Further information and TEMPUS publications may be obtained from the EC TEMPUS Office, Avenue des Arts 19H, B-1040 Brussels, telephone 32-2-212-04-11/12, fax 32-2-212-04-00.

Table 1. JEP Distribution by Coordinating Country and Country Involvement for Academic Year 1992/93

		ALL APPLICATIONS			SUPPORTED APPLICATIONS			
		Coordinating Country		Country Involvement	Coordinating Country		Country Involvement	
			%		%			%
EUROPEAN UNION COUNTRIES	Belgium	88	4.4	417	21.1	14	6.0	61	26.1
	Germany	196	9.9	834	42.1	17	7.3	97	41.5
	Denmark	51	2.6	212	10.7	12	5.1	29	12.4
	Spain	37	1.9	348	17.6	5	2.1	50	21.4
	France	211	10.7	684	34.6	28	12.0	83	35.5
	Greece	93	4.7	300	15.2	6	2.6	31	13.2
	Italy	131	6.6	531	26.8	13	5.6	62	26.5
	Ireland	23	1.2	178	9.0	2	0.9	25	10.7
	Luxemburg	1	0.1	6	0.3	0	0.0	1	0.4
	Netherlands	120	6.1	511	25.8	22	9.4	70	29.9
	Portugal	8	0.4	190	9.6	2	0.9	25	10.7
	UK	364	18.4	1039	52.5	36	15.4	122	52.1
EAST CENTRAL EUROPE COUNTRIES	Albania	0	0.0	49	2.5	0	0.0	8	3.4
	Bulgaria	41	2.1	258	13.0	6	2.6	34	14.5
	Czechoslovakia	147	7.4	584	29.5	10	4.3	31	13.2
	Estonia	7	0.4	101	5.1	0	0.0	8	3.4
	Hungary	127	6.4	523	26.4	9	3.7	24	10.3
	Latvia	16	0.8	79	4.0	1	0.4	11	4.7
	Lithuania	7	0.4	101	5.1	0	0.0	11	4.7
	Poland	82	4.1	571	28.9	25	10.7	100	42.7
	Romania	91	4.6	316	16.0	10	4.3	31	13.2
	Slovenia	35	1.8	91	4.6	12	5.1	20	8.5
OTHERS (EFTA COUNTRIES, U.S., CANADA)	Austria	8	0.4	77	3.9	1	0.4	6	2.6
	Australia	0	0.0	3	0.2	0	0.0	0	0.0
	Canada	0	0.0	21	1.1	0	0.0	3	1.3
	Switzerland	2	0.1	41	2.1	0	0.0	2	0.9
	Iceland	0	0.0	1	0.1	0	0.0	0	0.0
	Japan	0	0.0	5	0.3	0	0.0	0	0.0
	Norway	2	0.1	23	1.2	0	0.0	4	1.7
	New Zealand	0	0.0	0	0.0	0	0.0	0	0.0
	Sweden	12	0.6	67	3.4	2	0.8	9	3.8
	Finland	12	0.6	56	2.8	1	0.4	7	3.0
	Turkey	0	0.0	4	0.2	0	0.1	1	0.4
	USA	0	0.0	52	2.6	0	0.0	4	1.7
	Noneligible	67	2.0					0	0.0
	Total Projects	**1979**	**100.0**			**234**	**100.0**		

From Tempus Office

Table 2. JEP Distribution by Subject Area for Academic Year 1992/93

	ALL APPLICATIONS		SUPPORTED PROJECTS	
Subject Area	Number	%	Number	%
10: Management/business administration	283	14.3	40	17.1
20: Medical sciences	176	8.9	21	9.0
30: Applied sciences, engineering, technologies	552	27.9	55	23.5
40: Modern European languages	84	4.2	9	3.8
50: Agriculture/agribusiness	106	5.4	14	5.9
60: Environmental protection	146	7.4	24	10.3
70: Social/economic sciences (priority)	64	3.3	15	6.4
80: Priority areas (general)	43	2.2	7	3.0
91: Architecture, urban/ regional planning	39	2.0	6	2.6
92: Art/design	35	1.8	4	1.7
93: Education/teacher-training	114	5.8	12	5.1
94: Humanities/philological sciences	49	2.5	4	1.7
95: Law	28	1.4	3	1.3
97: Natural sciences, mathematics	192	9.7	14	6.0
98: Social sciences (nonpriority)	50	2.5	5	2.0
99: Nonpriorty areas (general)	17	0.9	1	0.4
Totals	**1978**	**100.0**	**233**	**100.0**

From Tempus Office

Figure 1. Total Budget Invested Since the TEMPUS Start in Eligible Countries

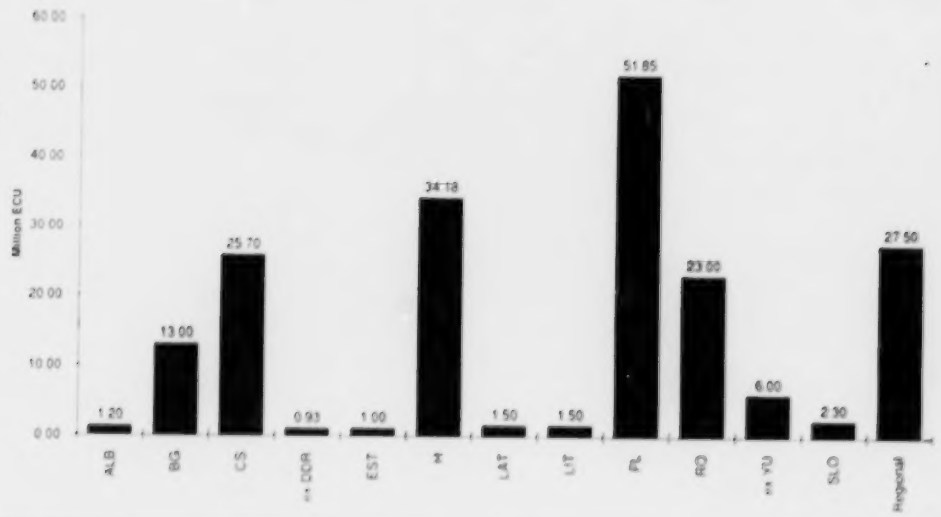


Figure 2. Number of Running Projects Per Eligible Country for Academic Year 1992/93

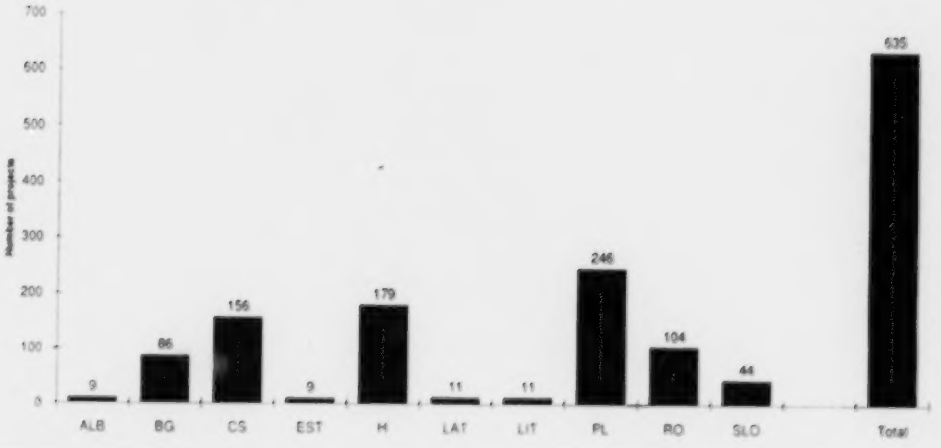
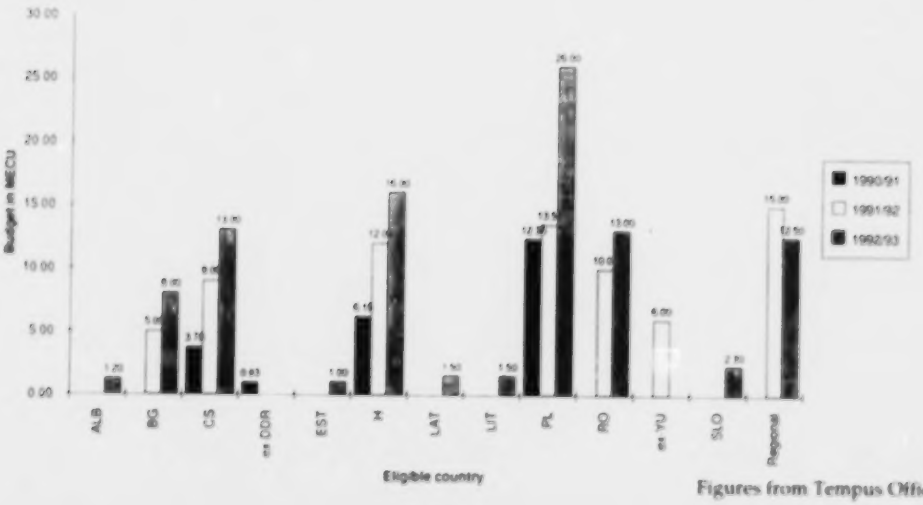


Figure 3. Evolution of TEMPUS Budget Per Eligible Country



Figures from Tempus Office

The European Science Foundation

W. SHAUINGER-HORNE

BACKGROUND

The European Science Foundation (ESF) was established in 1974. Its 54 member organisations from 20 countries are the major European academies and research councils supporting scientific research nationally. Although these are funded mainly by governments, ESF itself is a nongovernmental organisation. It maintains close associations with other international bodies with interests in scientific research, particularly the Commission of the European Communities.

ESF brings European scientists together to work on topics of common concern, to coordinate the use of expensive facilities, and to discover and define new endeavours that will benefit from a cooperative approach.

The scientific work sponsored by ESF includes basic research in the natural sciences, the medical and biosciences, the humanities and the social sciences.

ESF links scholarship and research supported by its members and adds value by cooperation across national frontiers. Through its function as a coordinator, and also by holding workshops and conferences and by enabling researchers to visit and study in laboratories throughout Europe, ESF works for the advancement of European science.

Basic Aims of ESF

1. To advance European cooperation in basic research.
2. To promote the mobility of research workers and to build scientific communities on a European scale in specific fields.
3. To provide occasions for its member organisations to exchange and develop information and ideas.
4. To facilitate cooperation in the use of existing research facilities, and the provision of new facilities.

5. To assist member organisations in the achievement of their basic research objectives through the planning, launching and, where appropriate, management of concerted actions and collaborative programmes.

In seeking to define all these aims, ESF recognises that other European scientific agencies and laboratories, usually specialised within one particular field of science, play important, and sometimes dominant roles. The scientific directorates of the Commission of the European Communities are of widespread and growing importance.

ESF has some particular strengths and advantages which enable it to make especial contributions to European science; among them are the support, knowledge and experience of its member organisations, and their intimate links with individual researchers, and ESF's experience in developing cost-effective means of scientific management on a transnational scale. ESF has more "connecting power" over a wider range of countries and basic disciplines than most other agencies.

How ESF Works

ESF pays for its activities through the contributions of its member organisations. These are made both to the ESF basic budget, to which member organisations contribute on a scale that is calculated on the basis of national incomes, and to specific scientific programmes and projects in which certain member organisations may have particular interest.

The modes of ESF scientific work vary with the expressed needs, and may change in character over the years. Broadly speaking, however, ESF Scientific Programmes almost always contain teams of scientists who carry out research. ESF Scientific Networks discuss, plan, innovate, analyse or coordinate research, but seldom carry out large amounts of substantive research. Programmes are often long-term, and are funded (except in their developmental phase) by participating member organisations. Networks may be of shorter term; they are funded by the Network Account from within the ESF basic budget.

There are 26 ESF Scientific Networks and 23 ESF Scientific Programmes in operation.

European Research Conferences

A new activity taken up by ESF only three years ago is that of holding European Research Conferences. These are conferences on a given topic, typically repeated every second year. The aim of these conferences is to stimulate free discussion among senior and younger researchers, who are especially encouraged to participate. There are no published proceedings from the conferences.

ESF Budget

The basic budgets of ESF for 1992, including the Network Account, amounted to 27.3 million French francs. This does not include the à la carte funding of specific Scientific Programmes and Phase 2 Scientific Networks by member organisations; if these are added to the basic budgets, the total annual cash flow is about 58 million francs.

ESF AND EASTERN EUROPE

Until recently, ESF membership consisted mainly of scientific organisations in countries of Western Europe (including, for example, Austria, Switzerland and the Nordic countries), but with the opening up of Eastern Europe new countries are joining: the ESF General Assembly approved applications from the Hungarian Academy of Sciences in November 1990 and from the Polish Academy of Sciences in November 1991. ESF aims to involve scientists from all over Europe and beyond in its activities, and there is an ad hoc fund to support the participation of scientists from nonmember countries.

The Crisis Facing Research in Eastern Europe

In association with the grave economic and social crisis facing Central and Eastern Europe, scientific research in those countries is also experiencing extreme difficulties which could lead to the complete loss of serious and valuable science. Some of the science programmes of these countries are of international stature and a serious loss would be experienced, both for the worldwide scientific community and for the people of those countries, if their high-quality scientific efforts were to founder.

Research, Higher Education, Skilled Manpower for Industry: A Linked System

These countries certainly need a continuing investment in well-trained graduates of Universities and *Hochschule*, with minds open and alert to scientific and technolog-

ical changes. In Eastern Europe, as in the West, campus-based research institutions must play a key role in keeping both teachers and students close to the moving frontiers of knowledge. And links between basic research and industry are, as is well known, also essential if inwards technology transfer (from Western to Eastern Europe and also *within* Eastern European countries) is to be successfully accomplished on a wide front.

It is this interrelated system to which, in the view of ESF, the scientific institutions of Western Europe should provide urgent support.

Aims of a Programme of Assistance and ESF's Potential Contribution

Decisions on the practical implementation of such support would of necessity have to be based on a numerate analysis of the magnitude of the problem and an evaluation of which sectors of science could use most effectively and rapidly the help which could be given. This analysis would also indicate the necessary *minimum* size (in sectoral and financial terms) of such an operation. The sectoral analysis should also be associated with the strategic goals of the action as a whole: the creation of a self-sustaining structure and dynamic in science and higher education which would serve the goals of technology transfer and the further technological and economic development of these countries.

ESF, being an organisation whose main interest is in fundamental science, could play a useful role in the discussions and decision-making by helping to mobilise the judgement and knowledge of all its member organisations in identifying the scientific groups and individuals on which support could be concentrated, and in proposing detailed support measures best justified on scientific grounds.

The following support measures for basic science might need in particular to be addressed:

- mobilisation (not just conservation) of the best scientists and equipment, so as to enhance their capacity to work creatively at the relevant frontiers of knowledge.
- creation of an evidently rational system of distributing scarce funds, so as to build confidence and an element of stability in a system in which scientists can effectively work. This may require some help in setting up the relevant management procedures.
- links with cognate work in the West. The ESF system of Programmes and Networks provides a good starting point, and our contacts with member organisations can help to widen the range of opportunities.

Parallel measures should be taken in the areas of higher education, industrially related research and technology transfer—the science system as a whole. ESF would not want to assume responsibility for these areas but would of course collaborate in that joint approach to the whole integral system which is really needed.

For these concerted measures to have a lasting effect, the selection of *targets* and the choice of *mechanisms* must play a central role. In the basic science sector, ESF offers a number of advantages:

1. access to scientists over a wide sector of Europe—The ESF Networks, Programmes and the **European Research Conferences (EURESCO)** already include up to one-fifth of scientists from Eastern Europe, but this amount could clearly be increased.
2. efficient and representative assessment procedures-The ESF Fellowships Scheme, and the mechanism for targetting built into many of our Programmes.
3. rapidity of action—ESF's normal mechanisms work well simply on the basis of communication access to individual scientists and all our member organisations.

Increasing Participation in Existing ESF Activities

ESF does the best it can to support scientists from Eastern Europe by inviting their participation in its Scientific Programmes and Networks, European Research Conferences and thematic schools, and it hopes to increase this level of involvement to the greatest possible extent.

—August, 1993

Ms. Shauinger-Horne is the Assistant to the Secretary General of the European Science Foundation. She prepared this article in consultation with colleagues at the European Science Foundation.

The European Cultural Foundation and Higher Education Initiatives in Eastern and Central Europe

ODILE CHENAL

When the European Cultural Foundation, whose objective was to ensure a cultural dimension to the process of European integration from the very beginning, was founded in 1954, cultural cooperation and educational exchanges were the main axes along which it developed its activities.

In 1957, the Foundation organized a congress on "Cultural and Intellectual Unity in Europe" (in Amsterdam), followed in 1958 by a congress on "Youth Training in Europe" (in Milan). Now, thirty-five years later, education and cultural relations are still central to the work of the Foundation.

Although the European Cultural Foundation addresses educational issues in general, the main focus of its activities in the educational field is on higher education and the training of professionals.

EAST/WEST COOPERATION IN HIGHER EDUCATION AND THE EUROPEAN CULTURAL FOUNDATION

The Foundation's "constituency" has always been the whole of Europe, but for evident reasons the initiatives undertaken in the early years were predominantly located in Western Europe.

Prior to 1989: The First Steps

The first direct involvement of the Foundation in Central and Eastern Europe was through the Grants Programme. In 1975, for example, the Foundation was providing support to the PEN Emergency Fund, which provided assistance to Central and Eastern European writers in difficulty. Some years later the Foundation was providing support to initiatives undertaken by the Netherlands Institute for Human Rights and the International Helsinki Federation for Human Rights.

In 1986 the Foundation took an important step in the field of literature by launching, together with a consor-

tium of American Foundations, the **Central and East European Publishing Project.** This ongoing project is based in Oxford and aims to overcome the intellectual gap between Western and East/Central Europe that developed and grew after the end of the Second World War. The Central and East European Publishing Project facilitates the publication and dissemination of literary and academic works by East European writers, both in their own languages and in translation. The project also sought ways in which to assist in the circulation of West European essays and social science texts in East/Central Europe.

In the specific field of education, the intervention of the European Cultural Foundation has been more indirect, although the Foundation as early as 1983 began supporting various research projects and conferences of the **Institut für die Wissenschaften vom Menschen,** which was to become a member of the Foundation's Network of Institutes and Centres in 1989.

The first member of the Foundation's Network to be established was the **European Institute of Education and Social Policy (EIESP),** and it has been mainly through this Institute and other Network members that the Foundation's various initiatives in the field of education have been carried out. The EIESP itself, established in 1974 as a centre of research and cooperation in education independent of national structures, has had members of its Advisory Council from Poland and Hungary since its inception, ensuring a truly European dimension to the policy of the EIESP and to its work on academic exchange in Europe.

The work carried out by the EIESP on academic exchanges, which played a central role in the preparation of the **ERASMUS Programme** of the European Commission, became more focused on Central and Eastern Europe from 1988 onwards. In 1988, Dr. Cerych (then Director of EIESP) and D. Kallen prepared a report on East/West academic exchange, which was followed by a meeting on the subject in June 1988 in Budapest. This was one of the preliminary stages in the development of the European Commission's **TEMPUS Programme.**

In the meantime, the European Cultural Foundation, at its Board of Governors meeting in 1987, officially decided to give priority to the development of closer cultural cooperation with Eastern Europe, where the first signs of change were growing more perceptible. This priority was also taken up by the other members of the Foundation's Network in the development of their own work, mainly in the furthering of professional contacts and research projects in Central and Eastern Europe.

1989-1992: The Years of Urgency

From 1989 onwards the work already begun by the Foundation and its Network assumed a new urgency, which was greatly facilitated by the contacts already developed.

The Foundation created new **National Committees** in Central and Eastern Europe; a Special Fund was created to enable the Foundation to respond speedily to initiatives coming from the region; a conference of West European foundations was organized in Leningrad (as it was then known) in order to stimulate cooperation amongst private organizations on pan-European programmes. The Leningrad Conference was followed by another, held in Vienna in 1991, where several new Central and East European foundations were represented.

On 9th November 1989, a historic day, the **European Foundation Centre** was officially established by a consortium of European foundations, with the European Cultural Foundation having taken the initiative. The role of the European Foundation Centre is to act as a clearinghouse for information on foundation-based and related activities throughout Europe, to provide a forum for the nonprofit sector and to offer assistance in the establishment of new foundations in Central and Eastern Europe.

In the field of higher education and academic exchanges, the main thrust of the Foundation's work was towards the stimulation of exchange and the support of analyses of the specific needs of the countries in Central and Eastern Europe. A small group of experts met several times in early 1990 to examine the issues facing the region, and the work of this group laid the basis for the launching of the TEMPUS Programme of the European Commission.

At the same time the Foundation conceived and launched, in cooperation with the Ford Foundation and a number of other American foundations, the **East/West Parliamentary Practice Project.** This programme aims, by means of workshops, to offer newly-elected parliamentarians and newly-appointed officials in the emerging democracies of Central and Eastern Europe the experience of their Western counterparts and Western academics specialized in relevant fields.

1992 and After: Reflection and New Challenges

After the first initiatives were taken and the first measures implemented, there came a time to refocus the policy of the Foundation on specific fields, in order to develop a more long-term plan of action and policy.

The continuing reflection on policies for and perspectives on higher education in Central and Eastern Europe is carried out both at the IWM and the EIESP, while the Foundation itself has become more directly involved in three distinct fields of activity. The first of these is the training of professionals in the cultural and educational field, being also carried out by the various members of the Foundation's Network. For example, the **European Institute for the Media**, based in Düsseldorf, has been running training programmes for media professionals from Central and Eastern Europe, and the CEEPP has been offering short courses and internships for publishing professionals in the region in cooperation with Western European publishing houses. The Foundation itself has been supporting other non-network initiatives through its Grants Programme.

The issue of mobility is another area in which the Foundation is concentrating its effort. This is addressed not only through the technical assistance offered to the European Commisssion on its large mobility programmes, but also directly through the Foundation's own work. As an example, the Foundation organized a conference with IIE in Wassenaar, the Netherlands, in November 1992 on International Academic mobility and will shortly be launching the APEX fund, which aims to promote the short-term mobility of artists and cultural organizers.

The third and final approach is through the priority given to the development of programmes within the field of cultural diversity. This is a new area of work for the Foundation and various projects are currently being worked on. One of these is a seminar on Cultural Pluralism and Arts Management Education to be held in November 1993, which will examine the ways in which future arts managers are trained and how their training equips them to deal with the culturally diverse wealth that is Europe. Once again, this is also an area that receives priority support from the Foundation's Grants Programmme.

During the Board Meeting of 1992, the Governors of the Foundation confirmed that priority would be given to the development of initiatives and programmes in Eastern Europe. However priority has also been given to the Mediterranean area, where the cultural dimension of the complex and often dramatic relations between people is very evident.

In accordance with the main direction of its policy, the Foundation wishes to make a contribution to the development of Europe as a whole and to be open to non-European cultures.

—July, 1993

Odile Chenal is the Director of Information and Programmes at the European Cultural Foundation in Amsterdam.

Opening Up the Centre: A Brief Review of the Central European University and the Soros Foundation Network

PAUL FLATHER

"The CEU is trying to do something not done in any other university." So George Soros began explaining the central mission of the Central European University (CEU) to an international gathering of intellectuals, scholars, educators and policy advisers in Hungary last summer. That mission is to work to open up the former closed societies of the former Commuist bloc and to help build open societies. As Soros says, "It is not enough to destroy a closed society to bring about an open one." This commitment—to support the process of transition, identifying the direction only in the most general, liberal ways—naturally incorporates major economic, social, political and cultural dimensions. But the primary thrust has undoubtedly been through higher education teaching, research, study and policy advice.

Soros's commitment toward open societies is very much informed by personal experience. He was forced out of his native Hungary after World War II, escaping both Nazi persecution and Communist totalitarianism. He made his way to Britain, working, amongst other things, as a newspaper seller and railway porter. He studied at the London School of Economics where he fell under the spell of Friederich Von Hayek and Karl Popper. After a brief period as a bored salesman, he joined a firm of investment brokers; he moved to the United States in 1956 and in 1969 founded his own company, which later became the Quantum Fund—now regarded as the best performing fund worldwide.

This background is important. It helps to explain two important features of the CEU and the Soros Network: first, the Network is committed in every way to supporting the creation of open institutions and societies; second, it operates largely in a very flexible, sometimes even "un-institutional" way, responding, quite properly, to changing and developing local needs in order to deliver on the first feature.

As Soros himself has written: "It is devoted to the ideal of open society, but it pursues its objective not directly by propagating the idea, but rather indirectly, by what it is and what it does. The network is an open system in evolution: it is constantly in flux, making it impossible for anyone to have a full grasp of all the activities going on within it. As such, by the time any summary or guide is complete, it is out-of-date." (This review will be no exception!)

Indeed, Soros finished his presentation in the great hall of Szegeleyes Castle last June by adding yet another dimension to this general mission—the establishment of a new policy advice centre to coordinate the various international task forces and external programmes run by the Network. This is to be called the Open Society Institute—an indication of its objective and a direct reference to the key work of his philosophical guru, Karl Popper—and has been allocated an overall budget no smaller than the core budget of the CEU, which means at least $10 million a year.

THE CENTRAL EUROPEAN UNIVERSITY

The ultimate goal for Soros remains nothing short of creating a network of centres that will reintegrate Central Europe into the Western education tradition, and the flagship of this drive is the CEU. It was founded by George Soros in 1990-1991 in response to specific demands from intellectuals from Eastern and Central European regions. It was initially set up with a guarantee of $5 million per annum for the first five years, with its long-term future to be reviewed in 1995-96. By mid-1992, Soros had pledged a rolling five-year guarantee. Then, after further reflection, last autumn Soros affirmed the future of the university, pledging $10 million a year for 20 years, plus a further $30 million towards building a campus in Budapest. This is believed to be among the largest gifts ever by a private individual to a higher education centre. The range of the CEU's new program activities—and correspondingly its guaranteed core budget—has of course much expanded beyond that initial commitment. If it continues to maintain the support of the academic community and its peers, it is expected to be endowed as a permanent institution. Initially, support was also pledged by the governments of Hungary and the Czech Republic. The former never materialised; the latter was unilaterally withdrawn after 18 months, and though the CEU does receive a number of external grants, its primary source is the Open Society Foundation based in New York.

The Mission Statement includes the following objectives:

- To develop a new curriculum which can be taught both at the CEU and other universities in the region
- To raise the standards and methods of teaching, study and research throughout the region
- To help educate a new corps of leaders from the region
- To foster cooperation and understanding among the citizens of the region
- To provide advice and assistance as appropriate
- To help mould and develop the institutions of open societies
- To provide new insights into the problems of the postcommunist era

All this will succeed only if the teaching, research and policy advice are of the highest quality and relevance. To ensure this, the CEU has drawn on the professional experience of renowned scholars from both the East and the West, aiming to provide for the region the academic equivalent of the best Western education, thereby attracting students, faculty and researchers of the highest calibre. Its "internationality" and its flexibility are encapsulated in the concept that the CEU does not seek to resemble any existing institution, but to hark back to medieval days when bands of scholars roved from place to place seeking enlightenment. Computers, faxes, modems and airplanes make this rather more manageable—and safer—these days.

This year CEU admitted some 400 fulltime students, drawn from throughout the region, to its eight postgraduate courses. Not surprisingly, it has rather more applications from East European students, but a very healthy international cross section has been admitted— including a handful of Western students. Those from the region receive full scholarships worth about $10,000-covering tuition, full board, travel, study costs, recreation and a monthly stipend. The CEU currently has about 100 fulltime teaching and research faculty, based at its two campuses in Prague and Budapest, and an extensive list of visiting and guest lecturers from all over the world. It will certainly be remaining at both campuses in the the

foreseeable future, though the university's headquarters will be in Budapest, with smaller campuses in Prague and possibly in Moscow and Warsaw, too.

The CEU is governed by an international Board of Trustees, chaired by George Soros, with its own University Senate and College Councils and new President and Rector, supported by independent boards responsible for monitoring all its programmes. As a young institution, still in its third academic year, it still has much to prove. But all external evaluations have been strong and have marvelled at the pace of development, warts and all (not surprisingly). Full accreditation is still to be achieved, but a provisional university charter was granted by the New York State Department in 1992 and formal validation of the individual programmes to degree-level is very much expected this year.

The CEU is very much more than a postgraduate teaching university: sometimes a foundation; sometimes a major research centre; sometimes a policy institute; sometimes a Western academic laboratory planted to refertilise the region's soil. For the purposes of this review, it can be seen to have five distinct functions: graduate teaching; research programmes; supporting individual and group research throughout the region; policy advice and research work and publishing the best results from both within and outside the CEU. Each will be examined in turn.

First, graduate teaching. The CEU currently offers one-year master's-level courses in the following disciplines: Economics, History, Sociology, Political Science, European Studies, History and Philosophy of Art and Architecture, Legal Studies and Medieval Studies. A new programme is also planned in Environmental Sciences and Policy, which currently offers two-month summer workshops. The language of instruction throughout is English, with students taught by faculty drawn from both the West and from Central and Eastern Europe.

Each programme is designed with its own specific mission. Thus, Art History aims to promote a better understanding of both the richness and the singularity of Central European art, with special reference to the art and architecture of the city of Prague. Economics aims to train economists from throughout the region to deal with the problems of transition to a market economy, with faculty from leading Western universities and institutions, supported by expert lectures from members of the IMF, the World Bank and other international organizations. European Studies is an interdisciplinary programme focusing on contemporary and future European political developments, but emphasizing the role of Central and Eastern Europe in the European integration process. The aim is both to train potential "Eurocrats" and to develop specialist area studies. Sociology sets out to foster a process of reinterpretation so that students may reconsider the nature of postcommunist society and the conditions leading to a strong civil society. Environmental Sciences runs a strong interdisciplinary program, providing both scientific and computer training as well as much-needed policy analysis techniques. Legal studies provides up-to-date training on both constitutional reform and law, and on business law, with many Western internships offered during the course. The History programme aims to interpret history in the region since 1789 within a wider European context, focussing on such themes as revolution, nationalism, the nation-state, fascism, and cultural and economic development. Medieval Studies not only opens up a much-ignored field of study in the region but sets out to put in historical context some of the contemporary debates about transition. Finally, Political Science offers very specific studies of the political transition, investigating elite changes and the stabilisation of the political economy.

The CEU also aims to provide a window of opportunity for some of the most able students whose studies merit a period of further study at a leading Western university. Thus, an extensive scholarship programme for its most successful students is in place, partly funded by Soros, last year sending 12 CEU graduates to Oxford. In all, almost 30 students were aided in further study. Others have won scholarships on their own merit to Western universities including Columbia, MIT and Harvard. Environmental Sciences currently offers its own extensive fellowship program for advanced study with leading scientists from Europe and North America for up to 30 young scholars, including 15 graduates on a specialized M.Sc. programme in Biological Sciences at Manchester University.

The aim throughout is not only to provide further study opportunities but also to find ways of bringing these scholars back to work and study in the region. This will not be easy to achieve. But more and more emphasis is being placed on appropriate careers and

placement advice, internships and placements are being used, and in the long run a doctoral programme involving study at the CEU and a Western university partner will also require the scholar to complete his or her studies back in the region, perhaps serving as a research assistant on a CEU programme or as a graduate instructor at a regional university in the final doctorate year. The aim is to get them to work at the appropriate level in their own country.

Also under development is a proposal to organize a network of affiliations between the CEU and a consortium of U.S. institutions of higher education which will oversee the large-scale exchange of undergraduate and graduate students. This new academic Consortium will also serve as a discussion and policy-making centre and clearinghouse for information on academic programs, exchanges and institutional requirements.

Second, the CEU has been promoting major research projects linked to all the disciplines it currently offers. A new international Research Board chaired by Sir Claus Moser, former head of the British Government Statistical Office and Wadham College, Oxford, has been set up to monitor and evaluate all current and future CEU academic research programs.

The **CEU Privatization Project** is a major programme devoted to research and policy analysis of the privatization process in 10 of the countries in Central and Eastern Europe, involving some 60 researchers and government officials. Two widely acclaimed volumes of country reports have been published, plus a further volume of essays. Among other initiatives, the Project is involved in the design and implementation of a small privatisation pilot scheme in the Russian city of Yaroslavl, and the design of major international assistance programs for large-scale privatisation in Russia.

The **Institute for Nationalism and Ethnic Conflict,** headed by Professor Ernest Gellner, formerly of Cambridge University, has been set up to look into issues currently amongst the most sensitive and important in the region. Major projects on nationalism, on the Czech and Slovak breakup and on the German question are underway.

The **Constitutional and Legislative Policy Institute (COLPI)** seeks to provide practical advice and aid in the reform of courts and systems of justice, in drafting constitutions and even in the training of judges. COLPI has developed an impressive array of national clients, for example helping to draft the Macedonian Constitution.

Many other research projects are underway, ranging from an extensive study on changing elite patterns in postcommunist societies, to research on the vase, column and obelisk in Central European art age patterns and science policy. All are in their early stages, and the real excitement will only become apparent over the next few years as the first results emerge.

Third is the external research support. The CEU has supported teaching and research initiatives at other institutions of higher education throughout the region through the **Higher Education Support Program (HESP)** with an initial grant of $25 million from the Open Society Fund. Priority areas of work include curriculum development, teacher training and retraining, departmental and university restructuring and reorganisation and the dissemination of Western texts, materials and knowledge. Grants can be regional, national or institutional in nature. Thus, a major regional programme is the **Civic Education Project,** which in 1992/93 placed 84 U.S. and some 25 U.K. students in regional universities as young graduate instructors. The scheme has been further expanded this year.

The **Research Support Scheme (RSS)** promotes first-class research related to the region, awarding $2 million in grants each year to individual and group research projects. Awards are given to scholars in all the main subjects covered at the CEU Colleges, including a number of priority areas identified each year by the international board which is chaired by Professor Gabriel Fragniere, now Rector of the Colleg d'Europe in Bruges.

Fourth, and most recently, the new **Open Society Institute** has been established as an overall clearing-house for all major research initiatives being implemented under the auspices of the CEU, the Soros foundation network and other Soros-affiliated institutes outside of the University proper. The Institute will coordinate the many projects currently underway at these various research institutes. The Institute will also provide a framework for intraregional cooperation and dialogue.

Fifth, the CEU has established its own university press to publish the best of the CEU's own research

work, as well as that of other academics within the region, whether supported by the CEU or not. The **CEU Press (CEUP)** will publish textbooks and monographs as well as essay collections. Books will usually be published in English and distributed internationally by Oxford University Press. The first CEUP books on privatisation have been published to critical acclaim, and several more on other topics are in preparation.

THE SOROS FOUNDATION NETWORK

There are currently some 27 national Soros Foundations and always, it seems, more on the way, each with its own independent advisory board, executive structure and local character. The Foundations vary in their stage of development, in their activities and structure, in the way they are financed and in the way they relate to their own society and government.

The first Foundation was set up by George Soros in 1979 to support human rights bodies as well as provide scholarships for black students at Cape Town University. It began to offer scholarships to Eastern European dissident intellectuals and in 1984 a Foundation was also set up in Hungary. Initially, the Foundation just supported a very eclectic range of scholars and projects. "It was just great fun undermining the closed communist world," Soros says. Now each Foundation has an independent board of trustees who spend considerable time and effort scrutinising applications and project bids.

In addition, the Soros Network encompasses the New York office and other offices in Western Europe; regional initiatives, such as the **Soros Centers for Contemporary Arts**; independently financed Soros organisations such as the **International Science Foundation** and the **Soros Humanitarian Foundation**, which have focused on Russia and the fomer USSR and the former Yugoslavia; and associated and cooperating institutions, such as **Internews**.

Soros has established various day-to-day guiding principles for the Foundations which very much illustrate the philosophy involved: they can support other agencies; they should have their own independence; they need not proclaim the Soros connection. Naturally, close links are promoted between the various activities of the CEU and the various local Soros Foundations and initiatives. One of the most innovative ideas is the East-East project which promotes joint projects and the sharing of information and ideas *within* the region.

The ultimate determinant is always local need. Each Foundation focuses mainly on education, cultural development, the promotion of pluralism and civil society, economy and combatting health and environmental problems. But no area is excluded from consideration and the general trend is towards proactive grant-giving. Incidentally, the Foundations as a general rule do not contribute to charities, pay the costs of conferences, support profit-making ventures or political campaigns, or provide endowments.

Typical grants might be for supporting student exchange programmes, curriculum reform, sponsoring a visiting professor, equipment grants for computers or fascimile machines or providing full or partial scholarships, travel or publication grants. Some 18 student advising centres have also been established to pay Western university application fees and to administer the GRE, TOEFL and SAT examinations free of charge. The promotion of English language teaching is another important feature of the Foundations' work.

On a larger scale, grants are made to projects which aim to promote the democratic infrastructure in countries. Thus, the Ukrainian Legal Foundation has been established to supervise the transformation of the country's legal profession, while a Soros-funded Council of Advisors provides advice to the country's legislators and parliamentarians on policy development. The voluntary sector has been supported, along with independent media organisations, and government and civic leaders have received travel and study grants.

Promoting management training and economic reform have been other key elements of the Foundations' work, and two active management centres have been set up in Budapest and Kiev. Health education and training, subsidising the distribution and shipping of donated medicines and internships for professional staff at Western hospitals are among the health initiatives backed by the Network. A series of Centres for Contemporary Art has been established throughout the region to promote and document local art.

But it is not only the Foundation as "enabler" or grant-giver that is so important. As one Executive

Director explained recently: "We seem to be on good terms with almost everyone. We are trusted, we're the good guys. So, if we decide to support a particular project, that project is seen as important and worthwhile in itself." Here, the Soros Foundations are providing an actual example of what the "Better Society" can be like. All those involved in the Foundations, from the chair of the board to the one receiving a small pump-priming grant, are affected. The actual also becomes a symbolic example of the approaching "Good Society."

CONCLUSION

All this is an exciting and challenging story, essentially derived from one man's will to redirect the wealth that he made in the West—and, by his own admittance, cannot easily spend—to help open up the East, from where he originally came. It might be worth asking: Does Soros make a difference ? A full answer will await the first detailed histories of the region. But the thousands of beneficiaries of Soros support—the Ministers and chief executives who went on Soros travel grants during the communist days, the hundreds of students who can access the latest information through the CEU Library, the small cultural papers that can continue their work—all provide an affirmative answer.

But it is not just the scale of the operation—probably well in excess of $60 million a year spent on mainly educational philanthropy, excluding his new welfare and aid programs—but the fact that all of it builds on local needs and harnesses local energies with a minimum of administration and bureaucracy. Of course, some of the experiments go wrong, but who is to say that UNICEF or OXFAM likewise do not waste large sums.

And, most important, to borrow the words of a popular British advertisement, Soros "reaches the parts" that other foundations and funds "never reach." A scholar may receive a scholarship offer but not the means to pass the GRE or even to travel to take up a place: the Soros Network is ready to step in. These small enabling acts, as much as the major $1 million research projects such as that on regional privatisation, and the fact that the focus is on the very specific region of Central and Eastern Europe—a region everybody likes to discuss, but where so few act—really distinguish this very special philanthrophy. And there is more support from the Soros Network on the way.

—April, 1994

Paul Flather was formerly Secretary General of the Central European University. At present, he is Director of External Relations at the University of Oxford.

SOROS-AFFILIATED INSTITUTIONS IN EAST CENTRAL EUROPE*

Regional

Central European University (CEU)
Prague College
Táboritská 23, POB 114
130 87 Prague 3, Czech Republic
tel 422.27.48.21, 422.27.05.42; fax 422.27.49.13

Budapest College
Hüvösvölgyi út 54
H-1021 Budapest, Hungary
tel 36.1.176.3733; fax 36.1.176.3574

Since 1991, the **Central European University (CEU)** has conducted a series of Master's level postgraduate programs in the social sciences, humanities, law and environmental science. Funded by the Open Society Fund and also by government contributions in the Czech Republic and Hungary, it collaborates closely with Soros Foundation Offices in East Central Europe.

The Higher Education Support Program (HESP), operating under the administrative umbrella of the Open Society Institute and centered at Budapest College, supports research and teaching in the humanities, social sciences and law. Three kinds of grants are provided: Institutional grants are made to new and/or reformed institutions, for example to the Center for Economic Research and Graduate Education (CERGE) at Charles University. Regional grants are made to help improve information technology, textbook publishing and instructor exchanges, for example, the Civic Education Project, under which graduates from Western countries lecture in East Central European universities, and to

*For the benefit of readers, the editors have included information on the major Soros-affiliated institutions in the region and, if available, those institutions' initiatives related to higher education.

the Central and East European Rectors Conference. National or "foundational" grants are made to help restructure higher education systems as such. According to the wishes of its founder, George Soros, the Central European University has allocated $25 million for HESP for distribution over five years.

Under another program, the Research Support Scheme, centered in the Prague College, numerous research grants have been made to scholars working in the social sciences and humanities for work concerning East Central Europe. In 1992, $2 million was distributed to fund 234 grants to individuals and groups of scholars.

The Central European University has also established the CEU Press to publish academic and research texts.

Albania

The Open Society Foundation for Albania
Rr. Labinoti, No. 25
Tirana
tel 355.42.34621; fax 355.42.34223

This foundation, in addition to sponsoring programs in media and journalism training, English language study, scholarships to Central European University and other higher education-related activities, has organized a major program of curricular development and restructuring at Tirana University. In cooperation with the Ministry of Education, the Foundation assists the faculties of Philosophy, Sociology, Economics, Law and History/Philology. In January, 1993, a team of 15 experts conducted a survey of these faculties and developed a reform plan along with the rector and deans.

The Foundation will also sponsor two foreign visiting faculty members at Shkodra University in the faculties of Economy and Law. It has arranged for students to receive scholarships both to the CEU and to the American University in Bulgaria.

Baltic States

Open Estonia Foundation
Olevimagi 12
Tallinn EE 0101
tel 372.22.247.228; fax 372.22.247.228

Open Society Fund–Latvia
K. Barona 31
LV-1722 Riga
tel 7.0139.348.680; fax 7.0319.348.680

Open Society Fund–Lithuania
Jaksto 9
Vilnius 2600
tel 7.0122.22.1687; fax 7.0122.22.1419

Bulgaria

Open Society Fund–Sofia
1 Bulgaria Square
NDK Office Building, 11th Floor
P.O. Box 114
Sofia 1463
tel 359.2.658.177; fax 359.2.658.276

The **Open Society Fund–Sofia**, as part of its larger mission of supporting the establishment of a democratic society, undertakes projects that assist the reform of Bulgarian universities. The Fund provides financial support for individuals studying abroad and in Bulgaria, financial support for conferences in Bulgaria, and travel grants for individuals attending conferences abroad. It also makes donations of equipment and publications. In 1992, the Fund supported more than 1300 individual and collective projects. While the number of scholarships it provides to Bulgarian students will continue to grow, after three years of operation the Open Society Fund has shifted its attention from contacts with other countries to the support of major projects within Bulgaria.

Croatia

Open Society Fund–Croatia
Krvavi Most 2
41000 Zagreb
tel 38.41.276.819; fax 38.41.275.741

Czech Republic

Open Society Fund–Prague
c/o The Central European University
Taboritska 23, Room 419
130 87 Prague 3, POB 114
tel 422.27.41.37; fax 422.27.37.40

Hungary

Soros Foundation–Hungary
Országház utca 9
1014 Budapest
tel 36.1.202.6211; fax 36.1.175.7767

The **Soros Foundation–Hungary**, the first of the Soros Foundations, was established in 1984. As the Soros network developed, the Hungarian founda-

tion served as an incubator for several programs that were later offered regionally. These programs include the Higher Education Support Program (HESP), the Oxford University scholarship scheme, student advising centers, student exchange programs, medical training, health education, and volunteer English teachers for secondary schools. A postgraduate Western scholarship program, conference and seminar attendance grants, short-term study tour grants, research and publication grants, and supplementary grants to students who have received scholarships from foreign universities are among the wide range of grants that the Foundation provides for Hungarian students and professionals.

Macedonia

Open Society Fund of Macedonia
Ilindenska bb., Room 310
9100 Skopje
tel 38.91.220.812; fax 38.91.116.534

Poland

Stefan Batory Foundation
9 Flory St.
00-586 Warsaw
tel 48.22.48.80.55; fax 48.22.49.35.61

The Batory Foundation serves as a recruitment center for mainly Western sponsors supporting a wide variety of scholarship programs. It cooperates with the Open Society Fund in arranging scholarships to Oxford and Cambridge Universities and with the Central European University for scholarships to that institution. A small number of scholarships are offered directly by the Foundation for study at the Institut für die Wissenschaften vom Menschen in Vienna and at its Summer School; with funding from the Soros Foundation, scholarships are provided also to the International Management Center and the Center for Central European Studies in Budapest, to the American University in Bulgaria, to the University of Chicago Law school, and to other institutions.

The Foundation also offers grants to support the improvement and modernization of the quality of teaching at universities; a "Polish Studies" program for East Central European scholars; funds to allow scholars to participate in international conferences; and plans additional programs to help finance study in Western universities.

Romania

The Soros Foundation for an Open Society
P.O. Box 22-196
Bucharest
tel 40.1.659.0696; fax 40.1.312.2745

A number of actions to help establish new institutions or develop existing ones in Romania have been made, which include, for example, a curriculum reform project for the departments of Social Work in the Universities of Bucharest, Cluj, Iasi and Oradea and the development of a business and economics curriculum at the University of Timisoara. Institutional support in the form of equipment, subscriptions, grants for scientific publications, etc., has been given to numerous Romanian universities and colleges.

A partnership scheme between the British Foreign and Commonwealth Office and the Soros Foundation provides scholarships for Master's degree programs at a number of British universities. The Foundation also provides grants for attendance at various summer schools and awards grants for the creation of seminars, workshops, and courses.

Slovakia

Open Society Fund
Staromestska 6
811 03 Bratislava
tel 42.7.314.730; fax 42.7.316.730

Slovenia

Open Society Fund–Slovenia
Miklosiceva 13
61000 Ljubljana
tel 386.61.302.912; fax 386.61.312.139

Yugoslavia

Open Society Fund–Yugoslavia
Kralja Petra 71
11000 Belgrade
tel 381.11.626.563; 381.11.634.652

Copies of the Soros Foundation annual reports, *Open Society News*, *CEU Gazette* or *CEU Prospectus* can be obtained from: The Soros Foundations, Publications Department, 888 Seventh Avenue, Suite 1901, New York NY 10106. Tel: (1) 212-757-2323; Fax: (1) 212-974-0367.

Transformation of the National Higher Education and Research Systems of Central Europe: A Program at the Institut für die Wissenschaften vom Menschen

AARON RHODES

Initiated in 1982, the Institute for Human Sciences/Institut für die Wissenschaften vom Menschen (IWM) is a Vienna-based Institute for Advanced Study with a special emphasis on promoting and supporting the intellectual integration of East and West. It is formed by a community of scholars consisting of corresponding, permanent and visiting fellows. The basis of the scholarly life of the Institute is the active exchange of ideas and opinions among individuals with different backgrounds and diverse perspectives. IWM's programs focus on the humanities and social sciences. In recent years, scholars and intellectuals associated with IWM have devoted an increasing amount of attention to analyzing the institutional foundations of scholarly discourse and societal understanding, especially in the fields of social policy and of teaching and research.

In 1991, with the support of the European Commission, the Institute launched an international project aimed at identifying the main problems confronting the reform of higher education and research in the postcommunist nations of Central and Eastern Europe and strategies for addressing them: "Transformation of the National Higher Education and Research Systems of Central Europe (TERC)" is conceived as a long-range project meant to generate and cultivate ideas salient to the reform process, to stimulate debate and try to make expertise on higher education and research from Western countries available. Beyond this, concrete strategies—"levers of change"—are developed and implemented to assist the process of reform. Some of the recommendations generated in the project have been implemented through actions of the European Commission, in particular a major 55 million ECE program of Cooperation in Science and Technology with Eastern and Central European countries—PECO—that was initiated in 1992.

IWM asked an international group of experts knowledgeable about the principles that, based on the history of the region and the experience of Western institutions, would be central to the reform process vis-à-vis intellectual institutions to serve on an Expert Committee and to advise the Institute in this area. Lord Dahrendorf, the Warden of St. Antony's College, Oxford, agreed to be the chairman of the Expert Committee. In addition, the Institute initiated a series of meetings involving national ministers responsible for higher education and research and other officials involved in international cooperation. The result was the formation of an International Political Commission, which asked the IWM to prepare its work, administratively and intellectually. This group was meant to help develop a regional dimension to the process of European integration in the relevant sectors and to provide an informal advisory mechanism to the European Union and other institutions seeking to be of assistance in the process of reform.

The Expert Committee sought first to provide the project with a broad foundation of data and ideas, to be a basis for focused efforts addressing specific problems. A series of research projects was therefore undertaken. They included empirical studies of the systems of higher education and research in Poland, Hungary and the Czech and Slovak Republics. Researches in each country have undertaken these studies, which aim to set forth, according to a more-or-less uniform scheme, the main elements of these systems, descriptions of the pertinent legislation, important problems like the relationship between the Academies of Science and universities, and changes since the political transitions of 1989. In Poland, IWM recruited Stefan Amsterdamski, who was secretary of state in the State Committee for Scientific Research in the first democratic Polish government after 1989, to undertake the study in Poland jointly with Julita Jablecka. It is in two parts: one a description of the Polish reforms and another an assessment of their results after two years. In Hungary, the empirical research was undertaken by György Fabri, former president of OFESZ (National Interest Representation of Higher Education). In the Czech Republic, two studies were undertaken by Jana Hendrichova of the Center for Higher Education Studies and Jan Koucky, the new (and former) Deputy Minister of Education. In the Slovak Republic, the empirical research was undertaken by two scientists in the Institute of Prognosis in the Slovak Academy of Sciences, Eduard Sarmir and Stefan Zajac.

The Expert Committee determined early on that it was of vital importance to gather and analyze not only "facts" about the reform of higher education and research, but also "opinions" or "perceptions" about this problem existing among informed observers and participants in the reform process. The Committee thus also called for a "qualitative study" to accomplish this task. The study was undertaken in 1992, designed and coordinated by Stefan Amsterdamski. The results were summarized under the title "Perceptions of Dilemmas," and have been published by IWM and in a number of journals. In the future, IWM want to publish up-to-date reports on science policy issues in Central Europe on a biannual basis in its series of TERC publications.

A suggestion was also put forward by the Expert Committee regrading the collection of data on important initiatives in the field ("case studies"). These would illuminate obstacles to reform and highlight projects that might be paradigmatic examples of how resources could be gathered. An initial examination of such case studies has led to the belief that they may provide a set of indicators of the effectiveness of various kinds of international assistance. More generally, it is thought that they may show where, in the existing systems, opportunities for positive change could be found. Therefore, in order to promote such initiatives, IWM has established the **Hannah Arendt Prize** to be given annually to an institution in the region, to recognize and assist important reform efforts. Supported by the German Körber-Stiftung, this prize has been named in honor of Hannah Arendt and is intended to encourage the continuation of efforts towards institutional reform in Central Europe.

The Expert Committee recommended that a primary strategy in the process of reform might be to establish centers of excellence in Central European universities by means of catalytic **"European Chairs,"** which are professorships attracting eminent scholars who would bring their knowledge of Western universities and research systems, their research programs, and their connections in the intellectual world into the region. With the financial support of the European Commission, the first chairs have been established in Warsaw (in social sciences and the

humanities), in Prague (in molecular biology), and in Budapest (in atomic physics). New European Chairs in the field of European Legal Systems and Social Policy will be created in Poznan, Olomouc, Bratislava and Budapest.

The project has increasingly concentrated on specific problems identified by the Committee as of particular importance to the transformation process. For example, considerable effort has been made to identify the main problems facing the reform of legal education. The Experts have also identified as particularly crucial the reform of public administration education at the university level. Education reform in this field is especially critical due to the urgent need for a new generation of highly qualified public administrators. Therefore, future efforts will be focused in this area.

As a first step in addressing this need, the Institute has convened a Working Group to discuss the problems of "The Restructuring of University Training in the Field of Public Administration in Poland." It consists of international and Polish experts in the field and hopes to develop concrete recommendations for the education of a new generation of public administrators in Poland. Based on a thorough analysis of the history and current reform of Polish postsecondary institutional training in this field, the Working Group wants to prepare a comprehensive catalogue of potential fields of activity, which will also provide a differentiated overview of the alternatives relevant to the reform of public administration training.

Within the framework of the project, the Institute has also supported a comprehensive study on "Central and Eastern Europe 2000," proposed by the European Institute for Regional and Local Development, Warsaw University. Teams of researchers from Poland, Hungary and the Czech and Slovak Republics have developed scenarios based on studies of various transformations in the realms of economics, technology and society and politics, which are meant to illuminate the changes required to allow integration into the European Union. The final report has been published by the European Community.

Another task the Committee set for itself is to further develop and strengthen public discussion of research and higher education reform in the new democratic countries. A major international conference on "The Structure and Legal Order of Higher Education and Research in Central Europe" took place in Vienna in December 1992. Furthermore, a series of open fora addressing these issues is being organized. The first event of this kind was convened at Warsaw University in June 1993: "Dilemma of Higher Education and Research in Poland and the West." It was followed by a public forum on "Changes in Central Europe: Challenges and Perspectives for Higher Education and Research" in New York in January 1994 and a forum at Comenius University, Bratislava, in June 1994. Similar events are planned in Prague and Budapest.

The members of the IWM Expert Committee are as follows:

Frans A.M. Alting von Geusau (Amsterdam)
Professor of International and European Law, Catholic University of Tilburg and University of Leiden

Colin G. Campbell (New York)
President, The Rockefeller Brothers Fund; President Emeritus, Wesleyan University

Umberto Colombo (Rome)
Former Minister of Universities, and Scientific & Technological Research; Former President, European Science Foundation (Strasbourg)

Lord Dahrendorf (Oxford)
Chairman; Warden, St. Antony's College, Oxford

Jonathan F. Fanton (New York)
President, New School for Social Research

Elemér Hankiss (Budapest)
Professor of Political Science, University of Budapest

Josef Jarab (Olomouc)
Professor of English and American Literature; Rector of Palacky University, Olomouc

Krzysztof Michalski (Vienna)
Director, Institute for Human Sciences; Professor of Philosophy, Boston University

Hans-Ludwig Schreiber (Göttingen)
President, University of Göttingen, and Professor of Law; Chairman, Board of Trustees of the Volkswagen Foundation

Dieter Simon (Frankfurt)
Director, Max-Planck-Institute for European Legal History; Former President of the Science Council of Germany (Wissenschaftsrat)

Juraj Svec (Bratislava)
Professor of Oncology; Rector, Comenius University; Director, Institute of Oncology, Slovak Academy of Sciences

Jerzy Szacki (Warsaw)
Professor of Sociology, Warsaw University

Hans Tuppy (Vienna)
Professor of Biochemistry, University of Vienna; Former Austrian Federal Minister of Science and Research

—April, 1994

Dr. Aaron Rhodes was the coordinator of IWM's TERC project from 1991 to 1993. At present, he is the executive director of the International Helsinki Federation for Human Rights, Vienna.

II. PROGRAMS AND CONNECTIONS

International Organizations

NORTH ATLANTIC TREATY ORGANIZATION (NATO)
NATO Scientific Affairs Division
B-1110
Brussels, Belgium
tel 32.2.728.4111; fax 32.2.728.4232

The **North Atlantic Treaty Organization (NATO)** supports activities which foster collaboration between scientists from NATO and East Central European countries. Such activities are normally in priority areas of disarmament technologies, environment, high technology and human resources. Support is also available to enhance the use of computer networking in projects in the priority areas. Support mechanisms include Collaborative Research Grants (to promote cooperation between research teams from NATO countries and East Central Europe), Linkage Grants, Advanced Study Institutes (a program which supports Central/East European scientists' attendance at international meetings), Advanced Research Workshops (similar to the previous but focused on meetings aimed at assessing existing knowledge and identifying priorities for future research), and Expert Visits. Application details and a list of current projects are available from NATO.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)
2, rue Andre Pascal
75775 Paris Cedex 16, France
tel 33.1.45.24.92.04; fax 33.1.45.24.94.38

The **Organization for Economic Cooperation and Development (OECD)** is undertaking a comprehensive array of studies of higher education and research in Central Europe through three of its directorates: the Directorate for Education, Employment, Labor and Social Affairs (DEELSA); the Directorate for Science, Technology and Industry (DSTI); and the Directorate for Agriculture. The activities of these and other OECD directorates are coordinated through the Center for Central and East European Economies in Transition.

The OECD held a regional conference on education and the economy in 1992; reports from the Czech and Slovak Republics, Hungary, Poland, Romania and Russia were included. Follow-up seminars are being organized within the framework of this activity and will include other countries, such as the Baltic states, several CIS republics and Albania (many of which were observers at the conference). The first seminar was held in Slovakia on the theme "monitoring and assessing the education system." The second is being organized with Poland on education reform in relation to the needs of the labor market. A third will be held in early 1994 in Romania on government-sponsored research.

Czech and Slovak Republics

The OECD has completed reviews of both higher education and science and technology policy in the CSFR. The OECD reviews usually include a Background Report by a team of researchers and an Examiners' Report by independent experts.

The study on higher education in Czechoslovakia, undertaken by the Directorate for Education, Employment, Labor and Social Affairs in 1991 and 1992, is the most elaborate study done in this area by the OECD. The aim of the review was to make recommendations to the government of Czechoslovakia and its ministries of education. The review consists of a Background Report and an Examiners' Report; these were discussed publicly in March, 1992, in a "review meeting" at which numerous rectors, deans, and others reacted and commented.

The main findings of the **Background Report** concerned the low enrollment in higher education (15 percent of the eligible age cohort), the need for more diversified and flexible curricula, problems of institutional governance, apathy among students and the difficulty of developing impartial, nonpolitical evaluation mechanisms for faculty and researchers.

The **Examiners' Report** noted the diffusion of political authority regarding higher education and research and recommended that universities and institutes of both the Czech and Slovak Academies of Sciences be under the jurisdiction of the respective ministries of education. The report noted the high number of students, proportionally, in technical fields. They found foreign assistance too concentrated in the major urban universities. The examiners proposed that the priorities for such assistance should be staff development, curriculum development and more access to books and journals.

The overall recommendations of the examiners called for the establishment of a high-level advisory group representing groups responsible for higher education to assess the main challenges facing higher education, to formulate policies, and to suggest incentives to help achieve them. The examiners also made recommendations on the diversification of funding sources to support higher education and more efficient governance and structuring of higher education institutions. They advocated the abolition of the academies of sciences and the merger of institutes and university faculties, and they noted three principles informing their recommendations: diversification, increased resource allocation, and promoting the role of higher education in the overall reform process (the last through various feedback mechanisms designed to enable and encourage greater responsiveness to signals from the economy).

The examiners' report with a summary of the review meeting will be published by OECD in 1993. A follow-up review is currently underway. Czech and Slovak authorities have been asked to describe progress on each of the recommendations, including specific steps taken to date. Reports from those authorities will be presented and discussed at a meeting of the OECD Education Committee in 1994.

The **Examiners' Report** from the science and technology policy study noted the bureaucratization of the S&T sector and proposed the restructuring of research, transferring most basic research to universities, and financing it through a block grant system. It has been suggested that the key task for S&T policymakers is to facilitate the transformation of the institutional and human resources so that they accord with the countries' emerging economic system. The "review meeting" took place in Smolenice Castle near Bratislava on June 11 and 12, 1992.

Hungary

The OECD Directorate for Science, Technology and Industry prepared a **Draft Background Report** on Science, Technology and Innovation Policies in 1992. This is mainly a catalogue of the main central government institutions in Hungary responsible for the organization and financing of technology and research. The **Examiners' Report** produced in the related science and technology policy study recommended the formation of "an ad hoc, high-level group" to prepare a technology strategy and, among other things, develop nonprofit organizations to stimulate research and development and higher education. This report noted problems stemming from the current graduate degree system in which two degrees — Doctor of Science and Candidate of Science — are awarded by a government commission dominated by the Academy, and a lower-status "university doctorate" is awarded by faculties throughout the country. The areas most affected by "brain drain" are the natural and

technical sciences, where, according to the Hungarian Central Statistical Office, 20-25 percent of the young and middle-aged researchers currently work abroad.

The OECD Directorate for Education, Employment, Labor and Social Affairs is currently carrying out a complete review of the Hungarian education system. Two pre-reviews have taken place (on higher education and school policy) and the final session was in Paris in November, 1993.

Poland

A review of the Polish educational system commenced in late 1993 will culminate in a review session in 1994.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)
European Center for Higher Education (CEPES)
Str. Stirbei Voda 39
70732 Bucharest, Romania
tel 40.0.1.6149956; fax 40.0.1.6415025
e-mail CEPES.RO

Regional Office for Science and Technology
1262 A. Dorsoduro
Venice, Italy
fax 39.52.89.995

The **European Center for Higher Education (CEPES)**, Bucharest, is a field unit of UNESCO specializing in higher education. It seeks to support cooperative regional and national projects, build databases and organize meetings and conferences (for example, a conference on "Academic Freedom" in May, 1992, and a high-level consultation for ministers of education and vice-ministers for higher education in East Central Europe on "Policy Issues of Quality Assessment and Institutional Accreditation" in May, 1993). UNESCO also coordinates several networks relating to higher education research and staff development; an electronic network, UNICOM, links the liaison officers in each country of the "Europe Region" with CEPES. It also undertakes studies on higher education with emphasis on East Central Europe. A complete list of publications relating to higher education in the region is available from CEPES.

UNESCO also supports a **Regional Office for Science and Technology for Europe (ROSTE)** in Venice, the activities of which are focused on research, training, and the flow of information. A number of these initiatives attempt to be helpful to scientific communities in East Central Europe, including projects on brain drain issues, organizational structures of science and technology, peer review, the management of research and innovation, and environmental issues. ROSTE sponsored a seminar on brain drain issues in November, 1991 and a second one in April , 1993.

WORLD BANK
Human Resource Development Division (EC2HR)
1818 8th Street, NW
Washington, D.C. 20433

Resident Mission in Hungary
Nagymezo. 44
1065 Budapest, Hungary
tel 36.1.269.0389/92; fax 36.1.269.0396

Hungary

The **World Bank** has under implementation a Human Resources Project which extends considerable assistance to higher education. The project, supported by a US$ 150 million loan from the Bank, began in the summer of 1991 and will reach completion at the end of 1995. The project has three major components which benefit higher education and research.

- **Higher Education** (World Bank funding—US$ 54 million)

Building on approaches recently adopted in OECD countries and in order to gain maximum benefit from available investment spending, the project supported the establishment of Catching Up with Higher Education in Europe (CEF), a competitive funding agency channeling investment funds to universities and colleges. The purpose of the CEF and the adopted funding mechanism is to provide incentives to institutions of higher education for the introduction of new programs, the improvement in inter-institutional collaboration and the integration of research and teaching.

This part of the project also supports the improvement in the financing and management of higher education, seen as an essential foundation for the expansion of higher education enrollments. In this regard, the project financed a feasibility study on revenue generation and cost recovery.

- **Foreign Language Training** (World Bank funding—US$ 12 million)

In keeping with the objective of increasing Hungary's international economic ties outside of its traditional CMEA framework, the project supports foreign language training. Funding on a competitve basis, administered also by the CEF, supports proposals which address the following priorities: accelerated and expanded foreign language teacher training provision; in-service training and retraining, especially of teachers of Rus-

sian; foreign language examinations; curriculum and materials development, the establishment of departments of applied linguistics; the establishment of foreign language service departments, to serve both university and college students and commerce and industry; and the development of bilingual vocational curricula in vocational secondary schools and in adult retraining centers.

- **Human Resources for Science and Technology Research** (World Bank funding—US$ 18 million)

In support of the Hungarian Government's recognition of the pressing need to preserve and develop the country's scientific and technological capacity, and to link it to teaching and to commercial activites, the project supports three interrelated activites: research undertaken by young scientists, the upgrading and expansion of the network of scientific instrumentation centers and the development of a national R&D network used by the academic and industrial reasearch communites. This part of the project is implemented by OTKA, an autonomous foundation established for purposes of funding research; the project also seeks to strengthen the institutional and financial capacity of OTKA. As with the project funds adminstered by CEF, these funds are distributed on a competitive basis.

Czech and Slovak Republics

A **World Bank** internal study, "Notes on Higher Education and Scientific Research," was produced in 1991, but was never elaborated into a formal report. To date, the Bank has had no instrumental involvement in higher education in the Czech or Slovak Republics.

Poland

In Poland, a study of employment is underway and another on health is planned, while the Bank has been actively involved in the educational sector since 1991. Initially, the Bank completed a Review of Expenditures in the Social Sectors, which included a chapter on Education and a chapter on Science Technology and Research (*Social Sectors Expenditure Review–1991*). This was followed by two different studies on specific subsectors. The first focused on science technology and research (*Scientific Research and Development in Transition: The Case of Poland–1992*). The second study focused on secondary education (*Investing in Human Capital–A Review of Secondary Education and Training Systems-1992*). This study led to the preparation of an Education Restructuring Project.

The Education Restructuring Project supports: (1) the restructuring of technical secondary education through a program of curriculum development leading to the introduction of 14 broad skill profiles with relevant assessment packages and the refurbishment, equipment and establishment of libraries for about 100 model technical secondary schools; (2) the design and delivery of in-service teacher education programs for an estimated 4,800 teachers at the secondary education level and the development of relevant pre-service teacher education programs in selected university teacher education departments; (3) the development of three pilot Higher Technological Institutes to train high level technicians at the post-secondary level in broad transversal occupational clusters; and (4) the development of an education management information system and the strengthening of project management and coordination functions. This project is expected to begin implementation in 1994.

Bulgaria

The World Bank recently completed a review of higher education and research focusing on the changing role of these sectors in support of the transition from a planned to a market economy (*Higher Education and Research–1992*). This has implications for management and financing at both systematic and institutional levels, for the interrelations between research and higher education, and for teaching and learning methods and program content in higher education. In all of these areas new initiatives will be required. Based partly on the findings of the above review, the Bank is preparing an education project in conjunction with the Ministry of Science and Education in Sofia. This project will: (1) establish the National Examinations and Educational Assessment Center to develop these activities nationally; (2) create a system of consumer subsidies for the purchase of textbooks by schools; (3) initiate career guidance services in secondary schools; and (4) establish two competitive funding mechanisms to support innovative activities in higher education and research projects with commercial potential initiated by young researchers. The project is expected to begin implementation in mid-1994.

Romania

The Bank has been involved in higher education in Romania since November, 1990, when a Bank study of the social sectors was started. This resulted in a sector report by the Bank, *Romania: Human Resources and the Transition to a Market Economy* (April, 1992), which was approved by the Romanian government for distribution in the public domain and which recommended the decentralization of higher education and the reduction of specialization. Higher education and research issues,

in addition to pre-university education, training and social protection, were analyzed in detail in this report.

This was followed in 1992 by the preparation of an Education Reform Project. This project focuses on raising the quality of basic and secondary education, on restructuring secondary technical/vocational education and on improving education financing and management. This project is expected to be negotiated to begin implementation in 1994.

In 1993, the Bank also assisted the Romanian government in obtaining a grant from the Japanese government to prepare a reform strategy for higher education and research. This Japan Grant supports the Higher Education Working Party, a high level committee of Romanian educators and researchers, in undertaking the technical background studies needed to prepare the reform strategy. The Romanian government has expressed interest in a Higher Education and Research Project to launch these reforms. The timetable for this envisages a white paper on higher education by the spring of 1994 and the start-up thereafter of project preparation.

European Institutions

EUROPEAN UNION (EU)

The **European Union (EU)** supports higher education and research in East Central Europe through a number of instruments and has organized several associated studies. The EU Commission's Task Force on Human Resources organized a mission to the main East Central European capitals in the spring of 1991 and produced a 46-page draft outlining main problems "in adapting . . . education and training systems to the needs of a democratic society and market economy." The EU has also undertaken exploratory missions focusing on research and technology development with the participation of members of the European Parliament.

EUROPEAN COMMISSION
General Direction XII
Science, Research, and Development
Directorate 'B' – Cooperation with nonmember countries and international organizations
Rue de la Loi 200
B-1049 Brussels
Belgium
tel 32.2.295.45.01, fax 32.2.296.33.08

PHARE

The main assistance instrument in higher education and research is **PHARE** (Poland and Hungary Assistance for Economic Restructuring).[1] Its main objective is to support measures promoting the transition to market economy, based on the request of the beneficiary countries. Most of its funds are directed toward providing systemic support to demonopolization, modernization, privatization, promotion of small and medium-sized enterprises, modernization of the financial sector and banking system as well as the development of labor markets and social sectors.

Further assistance in the field of scientific and technological development has been given in the framework of

PHARE; up to now about 30 million ECU have been committed for such activities, including 3.0 MECU for the modernization of the Hungarian research infrastructure, 10 MECU for the Hungarian CORD project, 0.5 MECU for exploratory action enabling the setting up of centers of excellence in Czechoslovakia, 4.5 MECU for environmental research on the Danube River, its estuaries and the Black Sea, 3.0 MECU concerning the effect on health of air pollution in the East Central Countries, and 5.0 MECU for ACE with a view to promoting the exchange of scientific and managerial knowledge and experience on specific topics in the field of economics and public administration.

PHARE funding (2.5 MECU) also supported a regional initiative under **COSINE** (Co-operation for Open Systems International Networking in Europe) Network Infrastructure, helping to connect East Central European universities to it.

Higher education projects have also been funded and include: in Poland, a 2.8 MECU grant mainly for vocational education, allocated to three ministries as well as employers and trade unions and partially to be used for strengthening the coordination of foreign assistance (1990), and a 1.0 MECU grant to be administered by the "Cooperation Fund" (associated with the Ministry of Education) for curriculum development in various applied fields, and language training centres in Bydgoszcz, Legnica and Wroclaw (1991); in Hungary, a 3.0 MECU grant to upgrade higher education, part of the program (described above) funded by the World Bank (1990).

Part of PHARE funds are allocated to support **TEMPUS** (Trans-European Mobility Program for University Studies), managed by the Task Force on Human Resources (DG V) with the assistance of the European Cooperation Fund of the European Cultural Foundation and a consortium of enterprises and other private organizations. TEMPUS began a three-year operational phase in February, 1991. It supports Joint European Projects involving both East Central and West European partners, mobility grants in both directions for students and teachers within Joint European Projects and some support for research related to TEMPUS. After the first year, many renewal applications were submitted, most of which were accepted. A total of 1401 applications over the course of the program have been submitted, 22.7 percent of which have been accepted.

In the EU, the United Kingdom has been a partner in more cases than any other country; other leaders are Germany, Italy and the Netherlands.

Over 29 percent of accepted Joint European Projects have been in the field of engineering and applied sciences. Over 18 percent have concerned business and management, and 2.5 percent have been in the social sciences.

Allocations of PHARE funds for TEMPUS activities have totaled 95.5 MECU over the two years of its existence.

Other Projects

Other EU activities include an action in 1992 to explore the possibilities for S&T cooperation with the countries of East Central Europe. Regrouped under the name PECO-COPERNICUS in 1992, the program earmarked 55 million ECU to support mobility, establish networks, organize workshops, conferences and seminars, and promote joint research projects. In 1993, a further 38 million ECU was made available to continue support for selected projects funded under PECO-COPERNICUS in the previous year. The Union has opened five of its specific R&D programs to participation (on a project-by-project basis) by organizations from East Central Europe. Those programs are: Environment, Non-Nuclear Energy, Nuclear Fission Safety, Biomedical and Health Research, Human Capital and Mobility, and Biotechnology, including the sub-area Ecology and Population Biology.

In 1991 Poland, Hungary and the CSFR became members of **COST** (European Cooperation in the Field of Scientific and Technical Research). Under the newly established **Cooperation in Science and Technology with Central and Eastern European Countries** program, the European Union allocated 5 million ECU to help the participation of those countries in COST projects.

COUNCIL OF EUROPE
Higher Education Section
Boite Postal 431 R6
F-67006 Strasbourg Cedex, France
tel 33.88.41.20.00; fax 33.88.41.27.81

The **Council of Europe** attends to higher education and research issues in East Central Europe mainly through the Council for Cultural Cooperation and its Education Committee, as well as through the Conférence Regulière sur les Problèmes Universitaires (CC-PU). Activities include a documentation center on higher education, a working group on equivalency issues, and conferences (for example, a conference was held in Poland on democratization and universities).

The Council of Europe has launched a major international project, of about four or five years in duration, concerning legislation and the reform of higher education in East Central Europe, with funding provided by

voluntary contributions from several member states and other members. This is seen as corresponding with the Council of Europe's commitment to strengthening the "rule of law." The project aims at making expertise from Western Europe available, emphasizing "failures and unresolved problems as well as successes." The project plan calls for comparative studies and documentation about other models of higher education laws.

EUROPEAN SCIENCE FOUNDATION (ESF)
1, quai Lezay-Marnesia
F-67080 Strasbourg Cedex, France
tel 33.88.76.71.00; fax 33.88.37.05.32

The **European Science Foundation** (ESF) is an association of 55 research councils and academies from 20 European countries. Its task is to put together proposals for pan-European research programs, which have to be accepted by the members and financed out of national budgets. With its own funds, ESF puts together research networks (currently 21, lasting three years each) that link teams from 10 or so laboratories across Europe. The investment targets areas with growth potential, from which the ESF usually wants to pull out when the "field begins to plateau."

Although the Foundation has the potential to grow into a full-scale Research Council for Europe, the development of separate (and different) bodies for different scientific disciplines and activities is more likely.

In East Central Europe, Hungary and Poland are already members of the ESF. Plans for future activities in East Central European countries are under development, as the ESF still seeks complementary bodies to assist the discussion about bilateral relations to different countries. In general the ESF does not intend to launch a special activity towards East Central Europe, but will extend its general policy to the respective countries.

STANDING CONFERENCE OF RECTORS, PRESIDENTS, AND VICE CHANCELLORS OF EUROPEAN UNIVERSITIES (CRE)
10, rue du Conseil General
CH-1211 Geneva 4, Switzerland
tel 41.22.329.26.44; fax 41.22.329.28.21

The **Standing Conference of Rectors, Presidents and Vice Chancellors of European Universities (CRE),** Geneva, is the association of European universities. Its membership comprises some 480 universities or equivalent institutions of higher education in more than 30 countries. It provides a forum for discussions on academic policy and the institutional development of universities, including their role within European society. The CRE has set up the European University-Industry Forum in collaboration with the European Roundtable of Industrialists. As a nongovernmental organization, it represents the universities' point of view in governmental and nongovernmental circles concerned with higher education in Europe and beyond. CRE organizes biannual conferences, training seminars for newly appointed university heads and other meetings on issues of particular interest to its members. It also runs a number of interuniversity cooperation programs and is a member of the transatlantic dialogue, together with the American Council on Education (ACE) and the Association of Universities and Colleges of Canada (AUCC).

CRE works in close cooperation with the national and regional rectors' conferences in Europe, some of which were founded under its auspices, e.g., the Conference of Baltic University Rectors and the Visegrad Group, consisting of universities in the formerly communist countries of East Central Europe.

EUROPEAN COOPERATION FUND
51, rue de la Concorde
B-1050 Brussels, Belgium
tel 32.2.512.89.38; fax 32.2.512.48.83

The **European Cooperation Fund**, created in 1977 by the European Cultural Foundation, aims to promote cooperation among East Central and West European countries in the fields of training, the rule of law and culture and society. It provides a framework for launching projects jointly with other public and private groups that will encourage principles of multiparty democracy and pluralism and that will promote private and entrepreneurial initiatives. It established the European Foundation Center and manages the TEMPUS program.

EUROPEAN CENTER FOR STRATEGIC MANAGEMENT OF UNIVERSITIES (ESMU)
14, rue Montoyer
B-1040 Brussels, Belgium
tel 32.2.513.86.22; fax 32.2.512.57.43

The **European Center for Strategic Management of Universities (ESMU)** includes a center devoted to cooperation with the Standing Conference of Rectors, Presidents, and Vice Chancellors (CRE). It cooperates on management problems with the universities of Warsaw and Gdansk, Charles University, Comenius University and the University of Economics in Budapest and operates a documentation center. The Center also cooperates

with the European Cultural Foundation in managing the EC-funded COMETT program.

EUROPEAN CULTURAL FOUNDATION (ECF)
Jan van Goyenkade 5
NL-1075 HN Amsterdam, The Netherlands
tel 31.20.676.02.22; fax 31.20.675.22.31

The **European Cultural Foundation (ECF)** encourages cross-cultural cooperation to promote activities of a pan-European character. The ECF initiates its own programs and projects, administers a limited grants program, giving priority to East Central Europe and the Mediterranean, manages and administers projects for third parties, mainly the European Commission, and gives network support to a number of associated institutes, centers and representative committees in 20 European countries.

Its efforts in higher education have focused on the establishment of the Institut Européen d'Education et de Politique Sociale (IEEPS) in Paris, the ERASMUS program and HEURAS (European Associations in Higher Education, the Secretariat), a separate unit now working within the European Cooperation Fund. The ECF has recently established the position of Director of Education, to coordinate the Foundation's activities in the field and to develop research and evaluation "related to inter-university cooperation and academic mobility and exchange."

EUROPEAN FOUNDATION CENTER (EFC)
51, rue de la Concorde
B-1050 Brussels, Belgium
tel 32.2.512.89.38; fax 32.2.512.32.65

The **European Foundation Center (EFC)** established by the European Cooperation Fund, is a membership organization and networking service center monitoring public policy. Its members are grant-giving and operating European foundations, trusts, charities, corporations and international funders with European social responsibility programs having their own fund or regular source of income and their own board of trustees or directors. The Orpheus Funding Communication Program encourages the establishment of forums, federations, and associations of foundations, particularly those serving East Central Europe. The first publication of the Orpheus Program is the *International Guide to Funders Interested in Central and Eastern Europe*, a directory of European grant-giving organizations. The Center is now establishing research and training programs. The New Europe Program will include an issue group devoted to education and training.

SECRETARIAT OF EUROPEAN ASSOCIATIONS IN HIGHER EDUCATION (HEURAS)
60, rue de la Concorde
B-1050 Brussels, Belgium
tel 32.2.514.33.40; fax 32.2.514.11.72

HEURAS (Secretariat of European Associations in Higher Education), which is associated with the European Cultural Foundation, aims to stimulate the activities of the associations constituting HEURAS and to develop projects and cooperative activities in the field of higher education in Europe through providing consultancy help to the associations and developing links among them. It intends to become a major service and information center in higher education, spanning East Central and West European countries, providing logistical and administrative support and consulting services. HEURAS represents the European Society for Higher Education (EURASHE), which has organized "twinnings" between vocational and technical schools in Western Europe and the Czech and Slovak Republics. Two other affiliated associations, ATEE (Association for Teacher Education in Europe) and SEFI (Societé Européenne pour la Formation des Ingenieurs) are active in East Central Europe through seminars and information dissemination. The SEFI recently published a *Guide to Engineering Education in Central and Eastern Europe*.

HEURAS hosts 16 working groups, an annual conference, specialist seminars, a summer university and a special HEURAS subnetwork works on the comparison of education systems and the teaching of teachers. Recent activities involve a curriculum development program within TEMPUS for the Baltic states, taking Baltic educators in engineering to institutions in Belgium, the Netherlands and Denmark.

EUROPEAN INSTITUTE OF EDUCATION AND SOCIAL POLICY
(Institut Européen d'Education et de Politique Sociale) (IEEPS)
c/o University of Paris IX - Dauphine
Place du Marechal de Lattre de Tassigny
F-75116 Paris, France
tel 33.1.44.05.40.12; fax 33.1.44.05.45.26

The **Institut Européen d'Education et de Politique Sociale (IEEPS)** has been a focal point of research and initiatives on the reform of education in East Central Europe. This has taken several forms, including consultations on higher education and vocational training initiatives undertaken by the the European Union, among them the TEMPUS program. The IEEPS has also provid-

ed expertise and advice on vocational education in Poland supported by EC-PHARE, and participated in OECD's review of higher education in the Czech and Slovak Republics. The *European Journal of Education* devoted an entire issue to the reform of higher education in East Central Europe and has dedicated much space to this subject in later issues. At the request of TEMPUS, the Institute has convened a "Working Party" to consider the reform of higher education in East Central Europe, and has prepared issue papers for the October, 1992, conference on "the role of higher education in the reform process of Central and Eastern Europe," convened by TEMPUS and the Task Force on Human Resources. The Institute has played a leading role in task forces relating to educational management in East Central Europe.

The IEEPS has also taken an active part in the preparation of the *Report on the Contours of a Strategy for Renewing Czech Education* (November 1992), undertaken at the request of the Czech Minister of Education within the framework of Dutch bilateral assistance. It has also participated in several World Bank education missions to Poland and Albania.

EUROPEAN INSTITUTE FOR THE MEDIA
Kaistrasse 13
D-40221 Dusseldorf, Germany
tel 49.211.90104.0; fax 49.211.90104.56

The **European Institute for the Media** provides a forum for the discussion of the media aims and policies by those representing the public as well as the professional interest in the media in European countries. Research is undertaken on the developing roles and influence of the media, and appropriate media policies are developed on this basis. The Institute promotes the use of the media to develop a better understanding of the shared European tradition. It also reinforces the aid and technical assistance which European countries provide to the countries of the Third World in the development of their media.

The Institute set up the East-West Cooperation Committee in 1989 in response to the growing evolution towards democracy in the East Central European countries, especially in the media field. The Committee meets twice a year. A varied program of cooperation includes research projects, the training of journalists and media executives, exchanges for media professionals, seminars for media executives and policy makers and monitoring media situations in East Central European countries. A series of occasional papers analyzes the newest and most controversial developments in the media scene in the countries of Eastern and Central Europe. Among the priorities for future development is an effort to expand training activities for East Central Europeans and information on available educational and funding opportunities.

NORDIC COUNCIL OF MINISTERS
Higher Education Department
Store Strandstraede 18
DK-1255 Copenhagen K, Denmark
tel 45.33.114.711
fax 45.33.933.572; 45.33.960.202

The Nordic-Baltic Scholarship Scheme, adopted by the Nordic Council of Ministers (Education and Research) on February 28, 1991, provided the framework for increased mobility of students, researchers and staff from Estonia, Latvia and Lithuania to the participating countries (Denmark, Finland, Iceland, Norway and Sweden). The Scheme is implemented with the cooperation of the national scholarship offices and ministries of education of the Nordic countries. Priority areas are language and culture of the Nordic countries, history, education, and the social sciences (particularly public administration and the study of Nordic social structures). Cooperative activities involving research and higher education institutions are also supported. Mobility grants for study, research and practical training are available for faculty, researchers and students.

The Nordic-Baltic Scholarship Scheme is one of three initiatives in the Council of Ministers' "Working Program for the Baltic Countries and Eastern Europe." The others are the Baltic and East Europe Nordic Project Fund and the Nordic Environment Finance Cooperation.

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS (ICSU)
51 Boulevard de Montmorency
75016 Paris, France
tel 33.1.45.25.03.29; fax 33.1.42.88.94.31

The **International Council of Scientific Unions (ICSU)** is a nongovernmental organization set up to promote international scientific activities in the different branches of science and the applications of these activities. ICSU has two categories of membership: scientific academies and research councils, which are national multidisciplinary bodies (84 at present) and scientific unions, which are international disciplinary organizations (20). The complement of these two groups provides a wide spectrum of scientific expertise enabling members to address major international interdisciplinary issues which none of them could handle alone. This

is achieved through the initiation, design and coordination of major international interdisciplinary research programs and through the creation of interdisciplinary bodies which undertake activities and research programs of interest to several members.

An ad hoc Committee on Science in Central and Eastern Europe (COMSCEE) was set up by the Council in 1990 to define the current problems affecting science in East Central Europe and to explore ways in which ICSU might help relieve these problems. One major activity of this Committee was the convening in April, 1993, of a high-level Conference on the Role of Science in Rebuilding Central and Eastern Europe. Another one was the evaluation of scientific institutes in Hungary in 1992, at the request of the Hungarian Academy of Sciences. The International Network for the Availability of Scientific Publications, set up in 1992 by the ICSU Press, has as one of its objectives the promotion and expansion of donations of books and journals to East Central Europe.

THE EUROPEAN MOVEMENT
Jan van Nassaustraat 109
NL-2596 BS The Hague, Netherlands
tel 31.0.70.328.0805; fax 31.0.70.324.6186

CENTRE D'ACTION EUROPÉENE
rue du Trone 98 - Bte 8
B-1050 Brussels, Belgium
tel 32.2.512.44.44; fax 32.2.512.66.73

EUROPA-ZENTRUM
Bachstrasse 32
D-5300 Bonn 1, Germany
tel 49.228.729060; fax 49.228.729.0018

The **European Movement**, which is affiliated with the **Europa-Zentrum**, Bonn, and the **Centre d'Action Européene**, Brussels, is an international organization of member institutions. The Congress of Europe, at its annual meeting in Budapest in September, 1991, recommended in its *Conclusion for Action* that the EC should develop new initiatives, along the lines of the Jean Monnet Chair inside the Union, to mobilize university action of this kind in East Central Europe, with priority given to initiatives that will offer university professors the additional training they need.

EUROPEAN ROUNDTABLE OF INDUSTRIALISTS (ERT)
rue Guimard 15
1040 Brussels, Belgium
tel 32.2.511.5800; fax 21.2.511.6577

The **European Roundtable of Industrialists (ERT)** developed a framework for action called European Unified Research into Educational Development (EURED), adopting models similar to those already applied in research and development. Through its working group on Central Europe and Higher Education (within its Standing Working Group on Education) the ERT organizes training seminars for younger managers (at present one seminar in Hungary, one in Poland, and two in the CSFR) and plans to intensify contacts with the universities in order to increase the matching of education and demand in the industry.

COIMBRA GROUP
60, rue de la Concorde
H-1050 Brussels, Belgium

The **Coimbra Group** is a network of 30 European universities (26 EU, 1 EFTA, and 3 ECE) mainly situated in Northern, Western and Southern Europe. East Central European members are Eotvos Lorand University in Budapest, Jagiellonian University in Cracow and Charles University in Prague.

The Steering Committee is assisted by several task forces, all of which concentrate on a specific issue. The Task Force on Central and Eastern Europe, established in 1990, focuses primarily on the implementation of the TEMPUS program. The Coimbra Group was able to coordinate two of the largest Joint European Projects, one in Modern Languages, the other in Applied Economics and Management in TEMPUS I. It is now active in coordinating JEP activities in Poland in university management, library management and European Studies in which eight programs are being coordinated, including two for East Central Europe (in law, sociology, national/cultural identity, political science, history and European integration).

EUROPEAN ASSOCIATION FOR INTERNATIONAL EDUCATION (EAIE)
Van Diemenstraat 344
1013 CR Amsterdam, The Netherlands
tel 31.20.625.27.27; fax 31.20.620.94.06

The **European Association for International Education (EAIE)** is a membership organization for professionals in international education in Europe and abroad. Founded in 1989, the EAIE seeks to facilitate the internationalization of higher education in Europe and enhance the quality of international educational programs and cooperative measures. The Association sponsors annual conferences; the 1992 Berlin conference drew 1200 participants from around the world. EAIE members repre-

sent many professional interests and institutions and include foreign student advisors, liaison officers, international relations managers and European educational program coordinators. The EAIE has made a special effort to encourage participation by members from East Central Europe — including leadership positions in the Association — and offers a number of conference fee waivers for East Central European members.

EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)
European Investment Bank
100 Boulevard Konrad Adenauer
L-2950 Luxembourg
tel 43.79.1; fax 43.77.04

The **European Bank for Reconstruction and Development (EBRD)** performs a similar function as the European Investment Bank or the International Bank for Reconstruction and Development specifically vis-à-vis East Central European countries. Its aim is to assist in the restructuring process by means of loans for the private sector and for infrastructure. While not financing research directly, the EBRD could provide financing for research activity as part of a larger investment. As original capital, 10 billion ECU have been allocated.

NOTES

[1] Launched in 1990 and initially directed towards Poland and Hungary, PHARE now involves 11 countries: Poland, Hungary, Albania, Bulgaria, Estonia, Lithuania, Latvia, the Czech Republic, Slovakia, Romania, and Slovenia.

Individual European Country Initiatives

AUSTRIA

Because of its historical ties with many East Central European countries, Austria has an extremely strong record of bilateral relations and programs. Austria reacted quickly to the changes of 1989-1990 in neighboring countries, and the Austrian Federal Ministry of Science and Research adopted ad hoc measures to support new student exchanges and scholarship programs. Some of the first programs to be initiated were summer school courses to introduce East Central European students to the principles and workings of market economies (by 1992, the number of summer schools had reached 20) and book donations valued at 3 million dollars to 30 university libraries throughout the region. In 1990, approximately US$ 8 million was provided by the Ministry in unilateral aid and bilateral exchange programs. In 1991, this sum was increased to $13 million, in 1992 to $15 million and in 1993 to $17 million. At present, the priority countries for Austrian cooperative programs are Hungary, the Czech and Slovak Republics, Poland, Romania, Bulgaria, Ukraine, Slovenia and Croatia.

ÖSTERREICHES BUNDESMINISTERIUM FÜR WISSENSCHAFT UND FORCHUNG
(Austrian Federal Ministry for Science and Research)
Österreichischer Akademischer Austauschdienst (ÖAD)
(Office of Exchange Programs)
Office for Exchange Programs with Central and Eastern Europe (BAMO)
Berggasse 21/7
A-1090 Vienna, Austria
tel 43.1.317.27.93; fax 43.1.317.27.95

The Ministry provides support for Austrian universities to establish or intensify relations with institutions in East Central Europe. This takes the form of support for independent "university partnerships," joint research links at the departmental level and the exchange of lecturers and professors. The Ministry also funds Aus-

trian universities' participation in TEMPUS Joint European Projects.

In 1993, a new multilateral mobility program called **CEEPUS** (Central European Exchange Program for University Studies) was initiated with the intention of fostering academic exchange between East Central Europe and Austria, Italy and other countries which may join the scheme. The program aims to foster renewed exchange among the East Central European countries, which has slowed considerably since 1989.

In 1990, the Austria-Hungary Action Program was launched and will continue for at least six years. The annual Austrian contribution is 10 million ATS (of a total program budget of 13 million ATS). The Action Program provides funding for exchanges of students and lecturers between Austrian and Hungarian universities; exchanges of teaching staff in schools, training establishments and research institutions; the provision of libraries and teaching materials; and intensified cooperation in industrial research. More recently, Austria-Czech Republic and Austria-Slovak Republic Action Programs have been initiated. Slovenia and Bulgaria have expressed an interest in negotiating similar bilateral agreements.

Support for individual East Central European students and scholars takes the form of several distinct programs: the Bertha von Suttner research scholarships for doctoral candidates; the Franz Werfel awards for university teachers of German language and Austrian culture; and junior visiting fellowships at the Institute for Human Sciences in Vienna.

OST UND SÜDOSTEUROPAINSTITUT
(Institute for Studies on Eastern and Southeastern Europe)
Josefsplatz 6
A-1010 Vienna, Austria
tel 43.1.512.1895

A key Austrian institution in the field is the **Ost- und Südosteuropainstitut (Institute for Studies on Eastern and Southeastern Europe)**, which was founded in 1958 and is financed by the Ministries of Science and Research and Foreign Affairs. The Institute assists with the implementation of joint research projects and organizes lectures, scientific meetings and seminars; it maintains field offices in Budapest, Prague, Brno, Bratislava, Kosice, Ljubljana and Lvov. The Institute administers the Constantin Jirecek Scholarships for historians from East Central Europe to carry out research in Austria for one to two months (70 grants in 1994).

OSTERREICHES AKADEMIE DER WISSENSCHAFTEN
(Austrian Academy of Sciences)
Dr. Ignaz Seipel-Platz 2
1010 Vienna, Austria
tel 43.1.515.81.353, fax 43.1.513.95.42

The Academy maintains agreements with academies in East Central Europe. Recently, the Academy has opened up an East-West Program, funded by the Ministry of Science and Research, which furthers cooperation between scientists in Austria and other EFTA countries and their counterparts in East Central Europe.

OSTERREICHISCHE REKTORENKONFERENZ
(Austrian Rectors Conference)
Liechtensteinstrasse 22
A-1090 Vienna, Austria
tel 43.1.310.56.56

The **Austrian Rectors Conference (Österreichische Rektorenkoferenz)** founded the Danube Rectors Conference in the early 1980's to help bridge the communication gap between rectors on both sides of the "iron curtain." Meetings of this group since 1989 have been held in Vienna, Linz, Budapest and Bratislava. Topics of discourse have included international cooperation and mobility and the management and governance of universities. In the 1990 meeting, technical universities in Budapest, Bratislava and Vienna signed a partnership agreement.

INSTITUT FÜR DIE WISSENSCHAFTEN VOM MENSCHEN (IWM)
(Institute for Human Sciences)
Spittelauer Lände 3
A-1090 Vienna, Austria
tel 43.1.313.580, fax 43.1.313.58.30

The Institute for Human Sciences (IWM)—established in 1982—is an intellectually and politically independent institute for advanced study. Its objective is to provide intellectuals and scholars from East and West with a forum for contact, exchange and collaborative work. The Institute is formed by an academic community of 25–30 scholars (5 Permanent fellows, 10–15 Visiting Fellows, 10 Junior Visiting Fellows, 3 translators and guests) and incorporated as a nonprofit organization. The basis of the scholarly life of the Institute is the active exchange of ideas and opinions among individuals with different backgrounds and diverse perspectives. IWM's programs focus on the humanities and social sciences.

IWM initiated two long-term policy oriented projects to address some of the major challenges of postcommunist transformation in the former East Bloc: "Social Costs of Economic Transformation in Central Europe," and "Transformation of the National Higher Education and Research Systems of Central Europe." IWM also awards scholarships designed to promote the translation of major works in the humanities and social sciences, as well as the history of philosophy and art, from Western European languages into Eastern European ones, or vice versa, of from one Eastern European language into another. The program aims to fill important gaps in literature and to encourage a broader exchange of ideas. Since 1989, the Institute has organized an annual two-week summer school on contemporary problems of political philosophy in order to provide student and young scholars with an opportunity to discuss important social and political issues. The general topic for the 1994 summer school is "Justice and Power."

IWM publications include *TRANSIT; Europaische Review; Castelgandolfo Colloquia* (5 Volumes); *IWM Lecture Series; Jan Patocka: Selected Writings*, and others. Furthermore, IWM organizes a wide range of lectures which give the fellows and guests of the Institute the opportunity to share and discuss the results of their current research with a wider public.

DENMARK

MINISTRY OF FOREIGN AFFAIRS
Danish Democracy Fund
2 Asiatisk Plads
DK-1448 Copenhagen K, Denmark
tel 45.33.92.19.17; fax 45.33.92.07.88

The Danish government established the **Danish Democracy Fund** in August, 1990, to assist countries in East Central Europe as well as developing countries in the strengthening of democratic social conditions and respect for human rights. The Fund attaches importance to an active Danish participation in all projects; grant applicants, therefore, are normally Danish individuals or groups.

While the primary aim of the program is the consolidation of democratic institutions, there is provision for educational activities, particularly through the provision of scholarships for study in Denmark and sending Danish visiting lecturers abroad. Funds are awarded to Danish educational institutions to carry out these activities.

FINLAND

In addition to participating in the Nordic-Baltic Scholarship Scheme, the Finnish government supports scholarships for postgraduate students and young researchers (under the age of 35). Foreign candidates must be nominated by their prospective Finnish host university or research institutions. Finland also grants scholarships under the auspices of bilateral cultural agreements; such agreements exist with Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia. The main coordinating body for educational and research exchanges is CIMO (the Center for International Mobility).

CENTER FOR INTERNATIONAL MOBILITY (CIMO)
Hakaniemenkatu 2
P.O. Box 343
SF-00531 Helsinki, Finland
tel 358.0.77.47.7033; fax 358.0.77.47.7064

The **Center for International Mobility (CIMO)** was founded on June 1, 1991. Most of the Center's staff and resources were transferred from the Ministry of Education's Scholarship Center and the Ministry of Labor's Section for International Trainee Exchanges. CIMO continues to run international and bilateral programs previously operated by those organizations. Its main objective is to promote international mobility within the field of education and training. Specific tasks include the coordination and administration of educational mobility and exchange programs, the development and maintenance of related information services and awarding grants and scholarships. In the field of mobility and exchange, the Center serves the needs of individuals, educational institutions, and also public and private institutions or organizations interested in the internationalization of education and working life.

FRANCE

Since 1990, France has devoted considerable resources to enlarging its cooperation with the countries of East Central Europe in science and technology. The cabinet meeting of April 25, 1990, defined a new policy of voluntarism and cooperation toward these countries. The main objectives of this policy are to intensify the multilateral projects of cooperation in science and technology, to support research and encourage twinning and network creation between laboratories and to initiate regional programs. An Interministerial Mission for Central and Eastern Europe (MICECO) was established to coordinate the implementation of this policy.

At MICECO's request, the Ministry of Research and Technology (MRT) (since July, 1993, the Ministry of Higher Education and Research), in cooperation with the Ministry of Foreign Affairs and the Ministry of National Education, prepared a list of cooperative projects launched by research institutions and ministries of science and technology. The MRT also administered various stipend and research programs. Since August, 1990, the MRT has awarded 660 fellowships to scholars from East Central Europe (out of 3700 grants worldwide): 339 postdoctoral positions (215 in 1991 alone) for periods between 6 and 12 months, and 321 nonrenewable high-level positions (including 215 in 1991) for periods between one to six months. A breakdown of grantees by country of origin shows a predominance of fellows from the former Soviet Union, followed by Poland (25%) and the Czech and Slovak Republics (15%). Because of the high ratio of applicants to available fellowships (3 to 1) the MRT was forced to reduce the duration of the individual programs.

The BRITEST program permits French industrialists to invite researchers for fellowships at laboratories of their choice with partial public funding. Such companies as Saint-Gobain, EDF, Rhoone-Poulenc, and Ciments Francais have already taken advantage of this program. A large number of laboratory twinnings have been supported as well.

MINISTRE DE L'ENSEIGNEMENT SUPERIEUR ET DE LA RECHERCHE
(Ministry of Higher Education and Research)
Foreign Affairs Department
1, rue Descartes
75231 Paris Cedex 05, France
tel 33.1.46.34.35.35

The **Ministry of Higher Education and Research** (formerly the **Ministry of Research and Technology**) gives priority to individual exchanges with the following aims: to support the development of existing networks and the creation of durable partnerships, to familiarize researchers with new tools and methods of research and to encourage their initiatives both as individuals and as members of their research institutions.

In relation to East Central Europe, the MRT has devoted resources to the following programs:

- The ACCES project to support the participation of researchers from East Central Europe in seminars, colloquia or congresses organized in France. In July, 1991, 483 researchers already benefitted from the program which allowed them to meet their French and foreign counterparts.
- The PARCECO project was created to facilitate the participation of French scientists in high-level seminars, colloquia or summer schools organized in Central or East European countries. In 1991, 50 French specialists participated in this program, contributing *in situ* to the education of young researchers.

Concurrently with the opening of existing European networks to East Central Europe's research institutions and laboratories, the MRT launched a program called "education-research networks," which links French and foreign research institutions around a specific topic in science. This program allows for the combination of French scholars' participation in conferences organized in East Central Europe and the acquisition of qualified foreign researchers for France. A dozen education-research networks have already been approved, and 20 more applications are currently being reviewed.

East Central European countries wishing to establish a new research organization have requested countries such as the United States, Germany, Great Britain and France to inform them of their respective ways of solving this problem. To present the organization of French science, the MRT has contributed to seminars of science policy. The first two seminars took place in 1991 in Hungary and Czechoslovakia, while three are currently under preparation for Romania, Poland and Bulgaria.

A research program on the transition process of Central and East European countries, entitled "Europe de l'Est," has been launched within the framework of the MRT's "Intelligence d'Europe" program, which has been calling for applications since 1990. A special program has been created for the former Soviet Union, and Diderot fellowships have been awarded.

In the field of scientific and technical information, fellowships have been awarded to Bulgarian, Hungarian and Czechoslovak specialists to familiarize them with French techniques of scientific and technical information. Since 1990, the MRT has made a grant to INIST for making documentation available to Hungary and Czechoslovakia.

France is also a co-founder of Collegium Budapest, a new interdisciplinary institute for advanced study.

Within the framework of the European Union's PHARE program of economic assistance to the countries of East Central Europe, the MRT supports the participation of French institutions in the following sub-programs: TEMPUS, designed to promote development of higher education systems; and ACE, aimed at promoting exchange of knowledge and expertise in the field of economic sciences.

In general, the MRT is making efforts to better associate with the countries of East Central Europe in the EUREKA

program and in the COST project; this support led to the admission of Hungary, Poland and Czechoslovakia to COST in November, 1991.

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)
(National Center for Scientific Research)
Division of International Affairs
15, quai Anatole France
75700 Paris, France
tel 33.1.47.53.15.15; fax 33.1.47.53.00.55

The **Centre National de la Recherche Scientifique (CNRS)** has a program of analyzing needs in scientific research in East Central European countries and arranging for cooperative research and exchange relationships. These include the "twinning of laboratories," meant to encourage researchers to remain affiliated with their home institutions, and other forms of cooperation. While active mainly in the former USSR, there are projects in Poland (for example, collaboration with the Institute of Politics of the Academy of Sciences), with both the CSFR and Poland in linguistics and a multinational project on the organization of research in East Central Europe.

The CNRS administers exchange agreements in cooperation with the Ministry of Research, the Foreign Office and the Overseas Cooperation Ministry. Although program emphasis is on the natural sciences, attention is paid to the social sciences as well.

CONFÉRENCE DES GRANDES ÉCOLES
(French University Conference)
60, Boulevard Saint-Michel
75272 Paris Cedex 06, France
tel 33.1.43.26.25.57

The **Conférence des Grandes Écoles (French University Conference)** is concerned with international relations and organized groups of constituent universities regarding their relationships with institutions from East Central Europe. This group meets three or four times a year. Its mission is to help coordinate TEMPUS projects among members, other relations with universities in East Central Europe and related missions. A newsletter, "La Lettre de la Conférence des Grandes Écoles," provides details of these activities.

CONFÉRENCE DES PRÉSIDENTS D'UNIVERSITÉ
(University Presidents Conference)
Commission des Relations Extérieures
47, rue des Ecoles
75230 Paris Cedex 05, France
tel: 33.1. 40.46.22.68

The **Conférence des Présidents d'Université (University Presidents Conference)**, Commission des Relations Extérieres, collects and publishes links between French and East Central European universities.

CEDUCEE, the Center on Education at La Documentation Francaise, Paris, has a special department on research and documentation on the former USSR, China and the countries of East Central Europe.

GERMANY

Scientific Organizations

ARBEITSGEMEINSCHAFT DER GROSSFORSCHUNGSEINRICHTUNGEN (AGF)
(Working Group of Large Research Institutions)
Ahrstr. 45
D-53175 Bonn , Germany
tel 49.228.376.741; fax 49.228.376.744

The **Arbeitsgemeinschaft der Grossforschungseinrichtungen (AGF),** an association of 16 national research centers, conducts R&D in fields requiring interdisciplinary cooperation and a concentration of personnel, funds and equipment. The R&D spectrum ranges from basic research through mission-oriented or strategic research to development of industrial technology. The research centers of the AGF are legally independent bodies or foundations, but the Federal Ministry for Research and Technology mainly coordinates, and thus strongly influences, the process of priority-setting within each of the centers. The involvement of individual institutions of the AGF in East Central Europe is considerable, but the scope of that activity is determined by each independent institution.

DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)
(German Research Society)
Kennedyallee 40
D-53170 Bonn, Germany
tel 49.228.885.1

The **Deutsche Forschungsgemeinschaft (DFG)** is an autonomous organization within the German scientific community that formulates its own statutes and elects the scientific and academic members of its agencies. The DFG serves science in all fields by financing research projects, promoting coperation among researchers and cooperating basic research. It also advises parliaments and public authorities on scientific matters, cultivates relations between science and the economy and promotes cooperation between German and foreign scientists.

Special attention is paid to promoting young scientists. The DFG supports research projects (including seminars and workshops) in basic sciences, but at the request of German scientists only. Joint projects with scientists from other countries have to be presented by the German partner. In order to support the East Central European scientific community in their present economic difficulties, special allowances have been made available for joint projects at the request of the German partner.

HOCHSCHULREKTORENKONFERENZ (HRK)
Ahrstrasse 39
D-53175 Bonn, Germany
tel 49.228.887.127; fax 49.228.887.110

The **Hochschulrektorenkonferenz (HRK)**, or **Conference of Rectors and Presidents of Universities and Other Higher Education Institutions** established an office for cooperation with East Central Europe in May, 1992. Its primary task is to assist in the process of reforming the higher education system and research in East Central Europe. The activities of the office include: (1) disseminating information materials on the German education system; (2) providing expert opinions on specific questions on East Central European higher education reforms; (3) organization and promotion of conferences and seminars for representatives of East Central European universities, scientific organizations and Ministries of Education in Germany; (4) organizing advising sessions and seminars with German experts in the East Central European countries; and (5) receiving representatives of Central European Rectors Conferences.

In the first year, the office has focused its attention on several areas relevant to higher education in the region, including legislation on higher education and research policy, relations between state and autonomous scientific entities and curriculum development. In July, 1993, the Conference held an international conference on "Perspectives on Higher Education Reform in Central and Eastern Europe." In November, 1993, the HRK published the results of a comprehensive survey of German higher education institutions' cooperation with institutions in the region.

KONFERENZ DER DEUTSCHEN AKADEMIEN DER WISSENSCHAFTEN
(Conference of German Academies of Sciences)
Geschwister-Scholl-Strasse 2
55131 Mainz, Germany
tel 6131.573735; fax 6131.51316

The **Konferenz der Deutschen Akademien der Wissenschaften (Conference of German Academies of Sciences)**, with the support of the Volkswagen Foundation, in 1992 launched a fellowship program for junior scholars from East Central Europe and the Baltic States. The first 18 fellows resident in Germany in the 1993-1994 academic year are from Bulgaria, Latvia, Lithuania, Poland, Romania, the Slovak Republic, the Czech Republic and Hungary. It is expected that 300 fellowships will be awarded over a five-year period.

The fellowship program supports primarily young scientists, possibly pursuing Ph.D. degrees, who have not yet obtained permanent university or academic positions (professorships) but who have distinguished themselves in their research. During their half-year fellowship tenure, the fellows carry out a research project under a German professor's supervision and have the opportunity to teach at a German university or college. The program is open for scholars of all disciplines with the exception of clinical medicine. Humanities and social sciences are given preference.

MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN (MPG)
(Max Planck Society for the Advancement of Sciences)
Hofgartenstrasse 2
80539 Munich , Germany
Mailing address:
Postfach 101062
80084 Munich, Germany
tel 49.89.21.08.1; fax 49.89.21.11.11

The **Max-Planck-Gesellschaft zur Förderung der Wissenschaften (MPG)** is financed jointly by the German federal and state governments and by private sources. But being an autonomous organization, its legal status is that of a private, nonprofit institution. With its annual budget of DM 1,47 billion (1992), it supports its some 60 institutes and 30 research groups. Some of the institutes (MPIs) are large research centers with several departments; others are rather small with only a few permanent staff members. The MPIs are devoted solely to basic research with an emphasis on new spheres of activities. The MPG is particularly notable for its efforts to involve scientists in the countries of East Central Europe into West European scientific and academic life through collaboration initiated by their collegues at MPIs. In February, 1992, the MPG invited 40 representatives from 16 East European countries to a colloquium on German research structure; representatives of scientific organizations in Germany, Great Britain, France and the Netherlands also attended.

Mediating Organizations

ALEXANDER-VON-HUMBOLDT-STIFTUNG
(Alexander von Humboldt Foundation)
Jean-Paul-Strasse 12
D-53173 Bonn, Germany
tel 49.228.833.0; fax 49.228.833.199

The **Alexander von Humboldt-Stiftung (Alexander von Humboldt Foundation)** was established in 1860 as a private foundation in memory of the naturalist Alexander von Humboldt, and re-established as a public foundation under private law in 1925 and again in 1953, to award fellowships to young academically trained and highly qualified persons of foreign nationality to enable them to carry out research projects in Germany and to maintain the resulting links.

Although the Foundation has not designated special fellowships for scholars from East Central Europe (since it does not apply quotas to any country or region), since 1953 some 3,200 scholars from the region have been awarded fellowships. The number of applicants from states of the former Soviet Union increased considerably in 1992; they represented 460 applicants among 2,700 applications for 500 fellowships awarded worldwide.

The Foundation's follow-up program supports former fellows upon their return home. The program includes short-term resumptions of research fellowships following successful work at home, return invitations to Germany for two- or three-month periods, grants for conference attendance and printing costs and donations of academic literature and scientific equipment. In 1989, for example, a considerable concentration of follow-up program resources was devoted to East Central Europe; 44% of all resumptions of fellowships, 52% of all book donations and 77% of the equipment donations were granted to ex-fellows from this region.

DEUTSCHER AKADEMISCHER AUSTAUSCHDIENST
(DAAD)
(German Academic Exchange Service)
Kennedyallee 50
D-53170 Bonn - Bad Godesberg, Germany
tel 49.228.882.0; fax 49.228.882.444

The **Deutscher Akademischer Austauschdienst (DAAD)** promotes relations with universities in foreign countries mainly through the exchange of students and scientists. Almost 50,000 scholarships were awarded in 1992 of which 11,000 concerned the region of the former socialist countries of East Central Europe. The DAAD's 1992 budget was close to DM 350 million.

The backbone of the DAAD grants program consists of scholarships financing one-year study programs at German universities for young scholars. Various shorter-term study and research scholarships and traineeships are also offered. For East Central Europe, the largest number of scholarships is offered in Poland (60 one-year stipends in 1993-94 and more than 100 short-term research visits for senior academics), followed by Hungary, the Czech and Slovak Republics and Romania. A smaller number of grants is administered in the other countries in the region (except Serbia), including Macedonia and Bosnia-Herzegovina. In addition to its scholarship programs, DAAD also provides lecturers for German language, literature and culture and other university teaching staff (170 people in the area in 1992).

DAAD elaborates and publishes information materials about possibilities to study in Germany and abroad. Extending its own programs, the DAAD serves the development of the political and legal basis for international mobility by consulting. A branch office in Moscow was opened in 1993, and an office in Warsaw is planned.

GOETHE-INSTITUT
(Goethe Institute)
Helene-Weber-Allee 1
80637 Munich, Germany
tel 49.89.159.210; fax 49.89.159.21450

The **Goethe Institute** is a nonprofit, publicly-funded organization which promotes wider knowledge of the German language abroad and fosters cultural cooperation with other countries. As a worldwide organization with 161 centers in 78 countries, the Goethe Institute plays an important role in teaching the German language, helping local teachers of German to update their teaching methods and promoting mutual understanding through an appreciation of German culture, thought and achievement. In close cooperation with institutions and individuals in the host countries, it organizes and promotes a wide range of cultural activities in the arts and humanities. A network of libraries and multi-media resource centers provides a comprehensive lending, reference and information service about Germany.

Apart from its regular scholarship and in-service training programs for teachers of German from abroad, the Institute has initiated a special three-year program (1993-95) for East Central Europe, offering a wide range of scholarships, seminars and workshops for teacher trainers, authors of language textbooks, curriculum

designers and others involved in the process of modernizing language teaching.

The Goethe Institute maintains branch offices in Warsaw, Cracow, Riga, Prague, Bratislava, Budapest, Bucharest, Zagreb, Sofia, Moscow, St. Petersburg, Minsk and Kiev. Regional priorities are the following: (1) retraining programs for teachers of Russian to qualify them to teach German, (2) large-scale in-service training for regional and local teacher training and (3) the development of new teaching materials and text books. The Goethe Institute also provides grants and scholarships to individuals and groups from the language teaching, research, scientific and media sectors.

Foundations

ROBERT-BOSCH-STIFTUNG
(Robert Bosch Foundation)
Postfach 10 06 28
70184 Stuttgart, Germany
tel 49.711.460840; fax 49.711.462086

The **Robert-Bosch-Stiftung (Robert Bosch Foundation)** concentrates on its German-Polish program, mainly for training teachers of the German language in Poland. The Foundation provides stipends for advanced students of German as a foreign language to universities in East Central Europe to serve as tutors for German language and geography. The Foundation also supports a program, managed by the University of Gottingen, which trains Poles to teach German. Their training, (culminating in a B.A. in German), takes place at the West Bohemian University in Plzen.

FRIEDRICH-NAUMANN-STIFTUNG
(Friedrich Naumann Foundation)
Königswinterer Str. 409
53639 Königswinter, Germany
tel 49.223.701.1; fax 49.223.701.118

The **Friedrich-Naumann-Stiftung (Friedrich Naumann Foundation)** defines itself as an *endowment for liberal policy* and thus concentrates in East Central Europe on political adult education (including market economy). Their activities include cooperation with new liberal parties and groups, information seminars, consulting, conferences and exchange programs for journalists.[2] Relevant results of conferences are published; by publishing readers as separate documents, the Stiftung gives its view of current situations and discussions.[3] The Naumann Stiftung has opened offices in all East Central European countries.

STIFTERVERBAND FÜR DIE DEUTSCHE WISSENSCHAFT
(Donors' Association for the Promotion of Sciences in Germany)
Barkovenallee 1
Postfach 164460
45224 Essen, Germany
tel 49.201.84010; fax 49.201.8401301

The **Stifterverband für die Deutsche Wissenschafte (Donors' Association for the Promotion of Sciences and Humanities in Germany)**, is an association of more than 200 foundations which distributes assistance on their behalf. The combined resources of the foundations is estimated at DM 951 million. The Stifterverband has developed an East Europe Program with funds from member institutions and other sponsors, with the aim of intensifying scientific contacts, promoting joint projects and elaborating and establishing supportive infrastructures. In the framework of this initiative, the Stifterverband has supported conferences in which those responsible for university and science management in East Central Europe have met to inform themselves about organization and promotion of science in Germany. Other activities under the East Europe Program follow the current main focuses of the Association, especially the structure and organization of science (e.g., a grant of DM 300,000 was given to the Collegium Budapest, an institute for advanced study), the promotion of junior scientists (e.g., support of the Ost-West-Studiengruppe at the Zentrum für Interdisziplinäre Forschung at the University of Bielefeld) and international scientific cooperation (mainly through additional support for German science organizations).

VOLKSWAGEN-STIFTUNG
(Volkswagen Foundation)
Kastanienallee 35
D-30519 Hannover, Germany
tel 49.511.8381.0; fax 49.511.8381.344

The **Volkswagen-Stiftung (Volkswagen Foundation)**, which promotes science and technology in research and teaching mainly through programs of fixed duration, at present emphasizes the transformation of economic systems in their legal, political and social dimensions and the study of dictatorships in the twentieth century from historical and social scientific perspectives. Support for cooperation among German and East Central European scientists is channeled through two of the Foundations's funding programs: "Cooperation with Natural and Engineering Scientists in Central and Eastern Europe" (which supports joint research projects and

summer schools), and "Common Roads to Europe—Foundations and Examples of Cooperation with Central and Eastern Europe in the Humanities and Social Sciences." The Foundation has provided funding for a fellowship program for junior scholars from East Central Europe administered by the Academy of German Science and Literature in Mainz. The foundation also provided grants to support scientific libraries and made a grant to the Collegium Budapest (DM 925,000).

FRITZ-THYSSEN-STIFTUNG
(Fritz Thyssen Foundation)
Postfach 180346
50506 Cologne L, Germany
tel 49.221.2575051

While the **Fritz-Thyssen-Stiftung (Fritz Thyssen Foundation)** has no particular emphasis in the region or in other countries, there has been support for a study of the European Union's approach to East Central Europe (analyzing the association treaties and their implications); it has also contributed to the Collegium Budapest (DM 3.6 million) and provided co-financing for Humboldt fellowships.

THE NETHERLANDS

THE NETHERLANDS MINISTRY OF EDUCATION AND SCIENCE
Directorate for Research and Science Policy
P.O. Box 25000
2700 LZ Zoetermeer, The Netherlands
tel 31.79.533.650; fax 31.79.531.953

The Netherlands has formed strong links in the higher education field with the countries of East Central Europe. In higher education and research, activities have been carried out in the framework of bilateral intergovernmental agreements and direct university cooperation. Bilateral agreements currently exist with Bulgaria, Hungary, Poland, Romania, the Russian Federation, the Czech Republic, the Slovak Republic and the former Yugoslavia (except Serbia and Montenegro). Since 1989, the STIR program, financed by the Ministry of Education and Science to support the internationalization of Dutch higher education, has supported a number of exchange visits by researchers and university staff between the Netherlands and East Central Europe.

Recent bilateral initiatives undertaken by the Dutch government have concentrated on Hungary and Russia, and it is expected that those countries will be the focus of future cooperative activities in science and technology funded by the the Ministry of Education and Science. In a new bilateral agreement with Hungary, the areas of cooperation include university research and research training, basic research through research councils and academies, infrastructure for basic research and cooperation with international organizations. Cooperation often takes the form of short- and long-term research visits.

In addition, the Ministry of Education and Science has donated 300,000 guilders for Collegium Budapest. The Ministry also provided extra funding for East Central European postdoctoral researchers to study at the Netherlands Institute for Advanced Study (NIAS) in Wassenaar.

MINISTRY OF ECONOMIC AFFAIRS
P.O. Box 20101
2500 EC The Hague, The Netherlands

The Ministry of Economic Affairs is responsible for coordinating the Dutch government's interministerial support initiative, Program Cooperation Eastern Europe (PSO), which began in 1991. The aim of PSO is to give technical assistance to East Central Europe in critical policy areas and to further ongoing political and economic reform processes. The implementation of the PSO program involves 11 Dutch ministries; in 1992, 65 million guilders was available for the program. A similar or higher amount was made available in 1993.

A significant part of the PSO program is Passage (Program for Funding Management Courses), which is administered by Nuffic.

CENTER FOR HIGHER EDUCATION POLICY STUDIES (CHEPS)
POB 217
7500 AE Enschede, The Netherlands
tel 31.50.893263; fax 31.50.356695

The **Center for Higher Education Policy Studies (CHEPS)**, associated with the Twente University of Technology, has organized some workshops on self-evaluation processes for higher education institutions in East Central Europe. It also organizes the European Higher Education Advanced Training Courses on behalf of the **Consortium of Higher Education Researchers (CHER)** for academics and administrators which have been attended by East Central Europeans under the auspices of the TEMPUS program.

DUTCH ORGANIZATION FOR INTERNATIONAL COOPERATION IN HIGHER EDUCATION (NUFFIC)
Kortenaerkade 11
P.O. Box 29777
2502 LT The Hague, The Netherlands
tel 31.70.426.0260; fax 31.70.426.0399

On behalf of the Dutch government, **Nuffic** coordinates and administers bilateral exchanges of students and faculty between the Netherlands and all the countries of East Central Europe. Nuffic also administers the Dutch government-supported program of management training in East Central Europe known as Passage. This program, initiated by the Ministry of Economic Affairs, enables managers from East Central Europe to receive training and participate in management courses in the Netherlands. In addition, Nuffic provides universities in the Netherlands with information about institutions and systems of higher education in the region, and vice versa.

NETHERLANDS ORGANIZATION FOR APPLIED SCIENTIFIC RESEARCH (TNO)
Schoemakerstraat 97
2628 VK Delft, The Netherlands
tel 31.15.696900

TNO has worked with Nuffic to exchange scientists and politicians with East Central European countries to promote new research and related trade links.

ROYAL NETHERLANDS ACADEMY OF ARTS AND SCIENCES (KNAW)
Trippenhuis
Kloveniersburgwal 29
P.O. Box 19121
1000 GC Amsterdam, The Netherlands
tel 31.20.551.0759/747

The **Royal Netherlands Academy of Arts and Sciences (KNAW)** has signed agreements with the science academies of the Czech Republic, Hungary, Poland, the Russian Federation and Slovakia. Each agreement allows for a total of 70 days of scientific exchange. Apart from these special agreements, the Royal Academy has a fund which enables Dutch scientists to participate in conferences and meetings abroad, including in East Central European countries.

THE NETHERLANDS ORGANIZATION FOR SCIENTIFIC RESEARCH (NWO)
Luan van Nieuw Oost India 131
P.O. Box 93138
2509 AC The Hague, The Netherlands
Tel 31.70.344.0640; 31.70.385.097

The Netherlands Organization for Scientific Research (NWO) administers several grant programs for Dutch scientists. It also offers grants which enable scientists from abroad (including East Central Europe) to take part in clearly-defined research projects. The participation of the foreign scientists must be beneficial to Dutch science. Only one of the programs administered by NWO is especially for an Eastern country: the program for assistance to research projects in cooperation with institutions in the Commonwealth of Independent States. This program is funded partly by NWO and partly by the Ministry of Education and Science. NWO and KNAW together are responsible for the Ministry-funded program Trends in Science, which offers scientists from East Central Europe the possibility to study at the Netherlands Institute for Advanced Study.

NORWAY

NORWEGIAN RESEARCH COUNCIL FOR SCIENCE AND HUMANITIES (NAVF)
Secretariat for Cultural Exchange Programs (SEP)
Sandakerveien 99
N-0483 Oslo 4, Norway
tel 47.2.157.012; fax 47.2.225.571

In 1992, Norway's Ministry of Foreign Affairs initiated and financed the East European Program, which is administered by the Norwegian Research Council for Science and the Humanities. The 1992 budget for the program was approximately 2 million Norwegian crowns; in 1993, the budget was doubled. In its initial phase, which will run until 1996, the program aims to expand cooperation with East Central European countries and to assist in the transition period, particularly the development of democratic institutions and sustainable economies. A primary emphasis of the program is support for education and research. For the time being, priority is being given to the Baltic States.

Norway has long-standing cultural agreements with several East Central European countries, providing primarily for the exchange of young researchers and students. At present, cultural agreements exist with

Bulgaria, Hungary, Poland, the Czech and Slovak Republics and some successor states of Yugoslavia.

SWEDEN

THE SWEDISH INSTITUTE
Department for Educational and Research Exchange
P.O. Box 7434
S-103 91 Stockholm, Sweden
tel 46.8.789.20.00; fax 46.8.20.72.48

The Swedish Institute, a state-financed foundation for cultural and educational exchange with individuals and institutions abroad, provides a number of scholarships for East Central European students and researchers. The programs have no national quotas. Priority is given to students and researchers in fields in which Sweden can offer special scientific or academic advantages.

SWITZERLAND

FEDERAL COMMISSION FOR EDUCATION AND SCIENCE
Bureau for Cooperation with Eastern Europe
Effingerstrasse 35
300 Bern, Switzerland
tel 41.31.61.44.10; fax 41.31.26.34.56

In 1990, the Swiss government initiated the Osteuropa-Programm of assistance in higher education and research. The main elements of the program are stipends for East Central European postgraduates and junior professors to spend an academic year in Switzerland; funds for research collaboration with Swiss scholars; and teacher-training and enhancement courses in various professional fields. Applications for the junior scholar stipends are available from the Federal Commission for Foreign Student Grants in Fribourg.

SCHWEIZERISCHE
HOCHSCHULREKTORENKONFERENZ
(Swiss Rectors Conference)
Seidenweg 68
3012 Bern, Switzerland
tel 41.31.24.83.41; fax 41.31.24.68.11

The **Schweizerische Hochschulrektorenkonferenz** (Conférence des Recteurs des Universités Suisses) made study visits beginning in 1991 to gather information about the reform process of universities in East Central Europe.

UNITED KINGDOM

FOREIGN AND COMMONWEALTH OFFICE
Cultural Relations Department (Education/Research Scholarships)
Joint Assistance Unit (Know-How Fund)
King Charles Street
London SW1A 2AH, U.K.
tel 44.71.210.6293

The **Know-How Fund**, managed by the Joint Assistance Unit within the Foreign and Commonwealth Office (FCO) of the British Government, provides advice and assistance in the transition to democratic and free-market systems; in principle "demand-led," the organization responds to requests which have been mainly in the areas of banking, finance, employment, local government reform and management training but include as well English language training, law, journalism, publishing and libraries. The FCO also provides funding for academic links between the United Kingdom and universities in East Central Europe and the former Soviet Union; those activities are administered by the British Council.

The Foreign and Commonwealth Office also provides partial funding for Oxford, Cambridge, Manchester and Warwick Universities' hospitality schemes for scholars and graduate students from Poland, Hungary, the Czech and Slovak Republics, Romania and Bulgaria. Costs are shared by the host universities, the Soros Foundation and the Foreign and Commonwealth Office. Approximately 100 postgraduates are expected to study in the United Kingdom during this 1993-1994 academic year under this scheme. Selections are largely made by Soros offices in the East Central European countries, in cooperation with academics from the receiving U.K. institutions.

The Foreign and Commonwealth Office provides funding to support scholarships for East European students at other U.K. universities. One of the largest initiatives is the T.G. Masaryk Scholarship Programme at the University of London's School of Slavonic and East European Studies, which funds approximately 30 awards annually for students, researchers and professionals in a range of academic and public policy-oriented fields.

BRITISH COUNCIL
Europe Unit, Education and Science Division
Medlock Street
Manchester, M15 4PR, U.K.
tel 44.61.957.7074; fax 44.61.957.7561

The **British Council** has offices and libraries in all East Central European countries, which are now administered separately to allow a flexible response to challenges. The main objective is teaching the English language and providing access to British experience in education and training, science and technology through specialist courses and seminars. The British Council administers, on behalf of the Foreign and Commonwealth Office, the various programs of cooperation in scientific, educational and cultural fields between the United Kingdom and individual East Central European countries. Among those the most important are the Academic Link Projects (with financing from the Know-How Fund), which link British and East Central European university departments and include exchanges. The Link Projects are designed to contribute to the promotion of market economies within a context of democratic governments by developing high-level national cadres qualified in management and capable of contributing to the implementation of political and economic policies. As much as 10,000 British pounds per link are available.

BRITISH ACADEMY
20-21 Cornwall Terrace
London NW 1 4QP, U.K.
tel 44.71.487.5966

The **British Academy** provides opportunities, through exchange agreements, for British scholars in the social sciences and humanities to undertake research in overseas countries. Formal exchange agreements providing for reciprocal exchanges of individual researchers exist with academies in Bulgaria, Croatia, the Czech and Slovak Republics, Hungary, Poland and Romania. With funding from the Foreign and Commonwealth Office, the Academy supports individual research visits and conference or joint symposia attendance by East European scholars whose work relates to the Conference on Security and Cooperation in Europe (CSCE); the British host applies for grant support for East Central European guests. Academy grants are available for foreign scholars (including East Central Europeans) to attend conferences in Britain.

THE ROYAL SOCIETY
6 Carlton House Terrace
London SW1Y 5AG, U.K.
tel 44.71.839.5561; fax 44.71.930.2170

The **Royal Society** supports joint research and individual fellowships in the natural sciences at the postdoctoral level. The European Science Exchange Scheme (ESEP) operates on the basis of agreements with scientific societies or academies in the Czech and Slovak Republics, Hungary and Poland. (Although formal agreements with Bulgaria, Romania and the successor states of Yugoslavia do not exist, scientists are exchanged on a regular basis.) Short-term study visits and longer-term (6-12 months) fellowships are available within the ESEP. Scientists in eligible countries apply through their national academies, which share some of the costs and also receive British scientists on a reciprocal basis.

The Postdoctoral Fellowship Program, funded in part by the Foreign and Commonwealth Office and the Wolfson Foundation, supports one-year attachments at a British laboratory for young scientists (under 40 years of age) from Hungary, Poland and the Czech and Slovak Republics.

The Society also encourages the establishment of joint projects between science departments or institutes in the United Kingdom and their counterparts in East Central Europe.

CENTRAL AND EAST EUROPEAN PUBLISHING PROJECT
St. Antony's College Annexe
Belsyre Court
57 Woodstock Road
Oxford OX2 6HQ, U.K.
tel 44.865.31.07.93; fax 44.865.31.10.21

The **Central and East European Publishing Project**, originally administered by the European Cooperation Fund, is now a charitable trust based in Oxford. The Project aims to promote the "common market of the mind" in Europe by encouraging the free flow of literature and scholarship throughout the region and especially between East and West. Its activities focus mainly on translation, publication support and research. The project also initiates its own programs including "know-how" training for East Central European professionals, publications and seminars. The Project supports the

continued publication of books and journals of quality in the languages of East Central Europe by specialist advice and grants to publishers and editors, and promotes translations from and into East Central European languages. Activities include grants for publication and translation to over 100 publishers, editors and translators; an internship program for publishers from East Central Europe at British publishing houses; specialist workshops in cooperation with St. Antony's College, Oxford, on book and journal publishing; and a translation scholarship scheme together with the Institute for Human Sciences (IWM) in Vienna whereby up to four translators a year are invited to the IWM to work on major translations.

COMMITTEE OF VICE-CHANCELLORS AND PRINCIPALS OF THE UNIVERSITIES OF THE UNITED KINGDOM (CVPC) AND THE ASSOCIATION OF UNIVERSITY ADMINISTRATORS (AUA)
29 Tavistock Square
London WC1H 9EZ, U.K.
tel 44.71.387.9231
fax 44.71.388.8649

The **CVCP** and the **AUA**, together with the Committee of Registrars and Secretaries (CRS), have organized an Eastern European Steering Group, which includes representatives of universities and of the British Council. Five study teams have made reports in 1991 on universities in Bulgaria, Czechoslovakia, Hungary, Poland and Romania, which the CRS/AUA International Committee used to identify problems and coordinate a U.K. response. Since then, further visits have been made to the Ukraine, and visits to Russia are planned.

The Eastern European Administrative Links Program aims to support administrative and managerial development in East Central Europe, Russia, Belarus and the Ukraine through workshops, conferences, visits by experts to the region and study visits to the U.K. by individuals from the region. This program is carried out with financial assistance from the participating U.K., the U.K. Government's Know-How Fund and the British Council.

Regional Supportive Institutions*

BULGARIA

THE AMERICAN UNIVERSITY IN BULGARIA (AUBG)
2700 Blagoevgrad
tel 359.073.24542; fax 359.073.25218

The American University in Bulgaria (AUBG) is a private English-language undergraduate college offering four-year baccalaureate degrees and open to students of all countries. AUBG is a joint Bulgarian-American initiative accredited in the United States under the auspices of the University of Maine. Classes at AUBG began in September, 1991 with an opening class of 208 students and sixteen full-time faculty. The University will grow to full enrollment of 1,000 students over the next several years.

AUBG is supported by the Open Society Fund, the Republic of Bulgaria, the City of Blagoevgrad, and the University of Maine.

CENTER FOR THE STUDY OF DEMOCRACY
1 Lazar Stanev Street
1113 Sofia
tel 359.2.70.61.64; fax 359.2.72.05.09

The **Center for the Study of Democracy** is an independent, nonprofit public policy research organization. It has organized projects on Legal Reform with the assistance of the American Bar Association and the Center for Constitutional Studies in Madrid. It also assists in developing new curricula in political science. The Center is funded primarily by foreign and domestic foundations, including the Association for European Cultural Community, the Central and East European Publishing Project (Oxford), the Friedrich Naumann Foundation, and the Open Society Fund–Sofia.

*Given the importance of independent institutions in the region, the editors are particularly interested in receiving information on new initiatives.

CYRIL AND METHODIUS FOUNDATION
19 Oborishte Str.
1504 Sofia
tel 359.2.43.00.01; 359.2.43.01.63
fax 359.2.44.60.27

The **Cyril and Methodius Foundation** promotes international cooperation in education, professional training, science and culture. One of its main activities is the formulation and implementation of selection policy and procedures for scholarships, fellowships and exchange programs. The Foundation regularly works with the members of host-country embassies in evaluating candidates. Working with the St. Kliment Ohridski University in Sofia, the Cyril and Methodius Foundation has developed an Eastern European Studies program for both Bulgarian and American students. This program will later be opened to other English-speaking foreign students.

THE FREE AND DEMOCRATIC BULGARIA FOUNDATION
22 Venelin Street
1000 Sofia
tel 359.2.89.00.61; fax 359.2.80.39.10

Since 1991, **The Free and Democratic Bulgaria Foundation** has helped Bulgarian students complete their education in France, Switzerland and the United States. It has also provided ten full scholarships to students attending the American University in Bulgaria.

NEW BULGARIAN UNIVERSITY
21 Montevideo Str.
Sofia 1635
tel 359.2.565.197; fax 359.2.565.037

The **New Bulgarian University**, founded in 1991, awards degrees and certificates in a wide range of fields. Its four divisions are the Undergraduate School, the Graduate School, the Continuing Education School and the Distance Learning School, which broadcasts lectures over the National Radio. The University receives funding from the Open Society Fund and national and international organizations. It cooperates with or receives support from numerous international organizations, including the American Bar Association, the British Council, the Bulgarian Academic Link Project, the Civic Education Project, the Ecole Regionale de Commerce, de Communication et d'Administration, HESP, the Open University (UK) and the University of Delaware.

CROATIA

CROATIAN ASSOCIATION FOR SOCIAL SCIENCES AND HUMANITIES (CASSH)
c/o Faculty of Political Sciences
Lepusiceva 6
41000 Zagreb
tel 38.41.412.283; fax 38.41.696.068

The **Croatian Association for Social Sciences and Humanities (CASSH)** works to upgrade and promote scholarship in the social sciences and humanities and to contribute to the formulation of Croatian recovery and development strategy. The Association pursues these goals through support of research, academic conferences, public lectures and publications. CASSH also collects information about international assistance programs, particularly those aiding the social sciences and humanities.

CZECH REPUBLIC

CENTER FOR HIGHER EDUCATION STUDIES
U luzickeho seminare 13
118 00 Prague 1
tel 422.54.35.73
fax 422.55.19.45; 422.24.51.12.96

The **Center for Higher Education Studies (CHES)** is a research and educational organization of the Czech Ministry for Education, Youth and Sports, which works to gather, analyze and disseminate experiences of Czech and foreign institutions; to monitor basic trends; to conduct research for decision making; and to develop and maintain contacts with nongovernmental organizations and partner institutions abroad. The Center comprises two research departments, an information section, a branch of the Center for International Recognition of Studies, Diplomas and Degrees and the autonomous TEMPUS Office. In addition, it carries out research projects and publishes their results. It is a

member of CHER and cooperates with the EU, the OECD and UNESCO.

JAN HUS EDUCATIONAL FOUNDATION (JHEF)
Radnicka 8
602 00 Brno
tel 42.5.422.12314; fax 42.5.422.12084

The Jan Hus Educational Foundation (JHEF), created in 1980 to support the underground university and *samizdat* publishers, is now a registered charity supporting higher education in the humanities. During the 1980s, the JHEF organized secret seminars in the social sciences and the humanities taught by British and Czechoslovak academics. Its work since 1989 has focused on supporting and maintaining East Central European cultural and educational traditions. The JHEF establishes contacts between Czech, Slovak and Western university instructors through working visits, conferences and lectures. It also provides literature for university courses and an information service for students. The Foundation has sponsored projects on legal education (including lectures and seminars, the distribution of books and the founding of a journal), English language teaching and the arts. The Foundation receives support from Jan Hus Educational Foundation in the United Kingdom and a French affiliate, the Association Jan Hus.

HUNGARY

COLLEGIUM BUDAPEST
Szentháromság utca 2
1014 Budapest
tel 36.1.156.1244; 36.1.156.1934; 36.1.156.1459

The **Collegium Budapest** is a European Institute for Advanced Study open to scholars from around the world. It is associated with the Wissenschaftsstiftung Ernst Reuter and is supported mainly by Austrian, French, German and Swiss donors. Each year, the Collegium offers up to twenty distinguished scholars and promising young scientists the opportunity to pursue their own research in an international and intellectually stimulating environment. Approximately half of these scholars come from East Central Europe. In addition to extending individual invitations, the Collegium establishes interdisciplinary working groups concerned with themes such as the transformation of planned economies, integrated environmental research and the comparison of legal systems in the emerging Europe.

DEMOCRACY AFTER COMMUNISM FOUNDATION (DAC)
Hattyú u. 16. III. 1.
1015 Budapest
tel 36.1.201.9853; fax 36.1.201.9853

The **Democracy After Communism Foundation (DAC)** is an independent, nonpartisan, nonprofit organization focusing on politics, economics and law, which has organized a number of training courses, conferences and seminars in collaboration with and with the support of a number of major funding organizations. In cooperation with the Columbia University Center for Law and Democracy, DAC held a conference on "Raising Rights Consciousness," which taught the foundations of Western law to 23 East Central European lawyers and professors in 1991, 1992 and 1993. DAC's research center seeks to create a database on East Central European parliamentary reform.

HUNGARIAN INSTITUTE FOR EDUCATIONAL RESEARCH
Victor Hugo utca 18-22
Budapest XIII
tel 36.1.129.7639; fax 36.1.129.7866

The **Hungarian Institute for Educational Research (HIER)** stresses its independence from any university and does not operate as a government agencies. However, its budget is guaranteed by the Ministry of Culture and Education. As a research institute, it has the status of an Institute of the Hungarian Academy of Sciences, and is dedicated to apply social science research in the field of educational systems and policy. It carries out research with the intent of influencing education policy, primarily at the national level, but also at the regional level. The Institute's four research units are: Political Studies (educational planning); Higher Education (policy issues); School Research; and Regional Studies. HIER also has an information and documentation section, a publications section and a network of experimental schools. It has also been the driving force behind the network of researchers in higher education, which links scientists in all of Europe.

INVISIBLE COLLEGE
Batthyány utca 32. IV.
1015 Budapest
tel 36.1.201.9872; fax 36.1.201.9872

The **Invisible College** is a scholarship system supporting university students in the humanities and social sciences. It assists students through grants, continuous supervision and a variety of services. Members are selected through competitive examination and they, with tutors and advisors, form a self-governing corporation with the goal of generating a high intellectual level and a sense of vocation.

POLAND

CENTER FOR SCIENCE POLICY AND HIGHER EDUCATION
Nowy Swiat 69
00-046 Warsaw
tel 48.22.26.07.46; fax 48.22.26.07.46

The **Center for Science Policy and Higher Education** is funded primarily by the Ministry of National Education. Its work mainly concerns problems of research and the organization of higher education in Poland. In conjunction with the State Committee on Scientific Research, it participates in the formulation and evaluation of research policy. In 1993 the Center participated in the International Adult Literacy Study coordinated by the Institute of Education, UNESCO and the Educational Testing Service.

SLOVAK REPUBLIC

ACADEMIA ISTROPOLITANA
P.O. Box 92
840 02 Bratislava 42
fax 42.7.764.336

The **Academia Istropolitana**, founded in 1990 by the Slovak Ministry of Education, provides postgraduate programs in interdisciplinary fields and fields that previously have been neglected. It currently offers one-year programs in "Environmental Planning and Management" and "Architectural and Urban Heritage Conservation" and a two-year course in public administration for Slovak and foreign students. It also operates an Advanced Study Information Centre under the auspices of TEMPUS and an Information and Documentation Center of the Council of Europe.

SLOVAK ACADEMIC INFORMATION AGENCY (SAIA)
Hviezdoslavovo nam. 14
P.O. Box 108
810 00 Bratislava 1
tel 42.7.333.010; 42.7.332.192
fax 42.7.335.827

The **Slovak Academic Information Agency** (SAIA) is an independent public service organization created to meet the demand within Slovakia for information about educational opportunities and developments abroad and to coordinate cooperation between Slovak and foreign educational institutions and individuals. SAIA's activities include: the collection and distribution of information about exchange programs; assistance to Slovak institutions in applying for financial support; the provision of administrative and review services to foreign foundations providing grants to Slovak institutions or individuals; and the publication of a monthly bulletin for the Slovak academic community. SAIA also includes an equivalency center, and a TEMPUS office operates as an independent unit of the Agency.

Rectors Conferences in East Central Europe

Rectors Conferences have been formed in many East Central European countries. These are voluntary organizations of the universities in each country aiming to promote the development of the country's higher education system and cooperation among universities. The rectors conferences' international committees maintain active contacts with numerous national and international rectors' organizations, including the Liaison Committee of EEC Rectors and the Standing Conference of European Rectors (CRE) in Geneva. The following is a list of rectors conferences active in East Central Europe.

ALPS-ADRIA

RECTORS' CONFERENCE OF THE UNIVERSITIES OF ALPS-ADRIA
University of Split
Livanjska 5/1
CRO-58000 Split, Croatia
tel 38.58.49.966

CROATIA

ASSOCIATION OF CROATIAN UNIVERSITIES
c/o University of Zagreb
Trg marsala Tita 14
CRO-41000 Zagreb
tel 38.41.464.233; fax 38.41.420.388

CZECH REPUBLIC

CZECH RECTORS CONFERENCE
Technical University of Liberec
Halkova 6
461 17 Liberec
tel 42.48.23.326; fax 42.48.23.317

HUNGARY

HUNGARIAN RECTORS CONFERENCE
THE HOUSE OF PROFESSORS
Ajtósi Dürer sor 19-21
1146 Budapest
tel 36.1.251.3003; fax 36.1.142.8157

POLAND

CONFERENCE OF RECTORS OF POLISH UNIVERSITIES
Uniwersytet Lodzki
ul.G.Narutowicza 65
PL-90131 Lodz
tel 48.42.78.98.85; fax 48.42.78.39.58

ROMANIA

NATIONAL RECTORS' CONFERENCE OF ROMANIA
University of Medicine and Pharmacy
str. Dionisie Lupu 37
R-Bucuresti
tel 40.1.610.4085; fax 40.1.637.2258

SLOVAK REPUBLIC

SLOVAK RECTORS CONFERENCE
Comenius Safarikovo nam. 6
818 06 Bratislava
tel 42.7.323.573; fax 42.7.321.197

SLOVENIA

ASSOCIATION OF RECTORS OF SLOVENIA
University of Ljubljana
Kongresni trg 12
SLO-61000 Ljubljana
tel 38.61.154.117; fax 38.61.154.053

YUGOSLAVIA

RECTORS' CONFERENCE OF YUGOSLAVIA
Palmoticeva 22/1
YU-11000 Beograd
tel 38.11.334.524; fax 38.11.324.729

Results of CRE Survey of Member Institutions on Links with ECE Institutions

In February, 1993, the Conference of European Rectors (CRE) undertook a survey of its member institutions concerning their activities and cooperative agreements with higher education institutions in East Central Europe. The survey was conducted at the request of the Institute for Human Sciences and the Institute of Internatonal Education for inclusion in this publication. CRE member institutions were asked to complete a brief survey form for each distinct linkage and to provide information on relevant program data, including the partner institution in East Central Europe, the nature of the cooperation, and the academic fields covered by the program. The CRE/IWM/IIE survey specifically requested information on cooperative programs operating outside of the EU TEMPUS program, which has provided the framework for a large increase in such collaborative programs. (For further information on the TEMPUS program, please consult Roger Absalom's article in Section I.)

Table 1. Summary of Linkages by Country

COUNTRY	ALBANIA	BOSNIA-HERZEG.	BULGARIA	CROATIA	CZECH REPUBLIC	ESTONIA	HUNGARY	LATVIA	LITHUANIA
Austria	0	0	0	1	13	0	12	0	1
Belgium	0	0	9	0	7	0	10	1	2
Denmark	0	0	0	0	0	0	2	2	3
Finland	0	0	4	0	6	19	29	5	9
France	2	0	14	0	24	4	21	3	3
Germany	1	1	16	9	40	8	60	11	4
Greece	1	0	3	0	1	0	0	0	0
Ireland	0	0	1	0	0	0	0	0	0
Italy	2	0	1	6	8	0	16	1	1
Netherlands	0	0	3	1	6	2	13	0	1
Norway	0	0	1	0	7	3	4	3	3
Portugal	0	0	0	0	1	1	0	0	0
Spain	0	0	2	2	6	1	6	0	0
Sweden	0	0	8	3	5	19	11	13	16
Switzerland	0	0	2	0	4	0	8	0	0
Turkey	1	2	6	0	0	0	1	0	0
UK	0	0	22	4	33	5	44	3	6
Vatican	0	0	0	1	0	0	0	0	0
TOTAL	**7**	**3**	**92**	**27**	**161**	**62**	**237**	**42**	**49**

MACEDONIA	POLAND	ROMANIA	SLOVAKIA	SLOVENIA	VARIOUS	YUGOSLAVIA	TOTAL
0	6	0	6	5	0	0	**44**
0	29	14	2	0	0	1	**75**
0	7	0	0	0	0	0	**14**
0	20	3	4	0	0	0	**99**
1	86	26	9	1	1	2	**197**
1	104	19	11	10	0	2	**297**
0	0	0	1	0	0	1	**7**
0	9	1	1	1	0	0	**13**
0	23	6	1	6	1	5	**77**
0	16	5	5	3	0	0	**56**
0	4	2	0	0	0	0	**27**
0	0	0	0	0	0	0	**2**
0	17	3	5	2	1	1	**46**
0	33	4	6	1	0	0	**119**
0	9	3	2	0	0	1	**29**
1	3	1	0	0	0	1	**16**
2	66	18	11	5	0	4	**223**
0	1	0	0	0	0	0	**2**
5	**433**	**105**	**64**	**34**	**3**	**18**	**1343**

Table 2. Linkages by Field of Study

Country	Natural Sciences		Social Sciences		Business\ Economics		Other	
Albania	3	43%	1	14%	1	14%	2	29%
Bosnia-Herzegovina	0	0%	1	25%	1	25%	2	50%
Bulgaria	33	32%	13	13%	12	12%	44	43%
Croatia	6	19%	6	19%	4	12%	16	50%
Czech Republic	67	35%	37	19%	19	10%	70	36%
Estonia	26	35%	12	16%	11	15%	25	34%
Hungary	96	34%	42	15%	36	13%	109	38%
Latvia	15	38%	5	12%	4	10%	16	40%
Lithuania	16	26%	14	23%	9	14%	23	37%
Macedonia	0	0%	1	20%	0	0%	4	80%
Poland	160	30%	80	15%	80	15%	207	40%
Romania	50	41%	14	11%	10	8%	49	40%
Slovakia	27	40%	8	12%	9	13%	24	35%
Slovenia	10	26%	6	15%	9	23%	14	36%
Various	0	0%	0	0%	0	0%	3	100%
Yugoslavia	9	38%	4	17%	3	12%	8	33%
Total	**518**	**33%**	**244**	**15%**	**208**	**13%**	**616**	**39%**

Table 3. University Linkages by West European Country

Austria

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
CROATIA	Karl-Franzens University of Graz	University of Zagreb	1981	General Research Student	Economics; Humanities; Sociology; Law; Medicine; Theology
CZECH REPUBLIC	Karl-Franzens University of Graz	Palacky University	1991	General Research Student	American Studies; English; Law
	Linz University	Charles University	1990	General Research Student	
		Czech Technical University	1990	General Research Student	
		Prague University of Economics	1990	General Research Student	
		Technical University of Brno	1990	General Research Student	
		University of West Bohemia	1991	General Research Student	
	University of Vienna	Charles University	1987	General Research	Humanities; Law; Medicine
		Masaryk University	1991	General Research	Business/Economics Humanities; Law; Medicine
	Vienna Agricultural University	Prague Agricultural University	1992	Research Student	Agriculture
		University of Agriculture	1992	Research Student	Agriculture
	Vienna University of Economics and Business Administration	Prague University of Economics	1990	Research Student	Business/Economics

Austria (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Vienna Veterinary University	University of Veterinary Science and Pharmacy in Brno	1991	Research	
HUNGARY	Karl-Franzens University of Graz	Janus Pannonius University of Pecs	1991	General Research Student	
	Linz University	Budapest University of Economic Sciences	1990	General Research Student	
		Technical University of Budapest	1990	General Research Student	
	University of Vienna	Budapest University of Economic Sciences	1988	General Research	Business/Economics
		Lorand Eotvos University	1975	General Research	Humanities; Law; Medicine
		Semmelweis University of Medicine	1988	General Research	Medicine
	Vienna Agricultural University	Pannon University of Agricultural Sciences	1991	Research Student	Agriculture
		University of Agricultural Sciences	1991	General Research Student Training	Agriculture
		University of Forestry and Wood Sciences	1991	Research Student	Forestry
		University of Horticulture and Food Technology	1993	Research Student	Food Sciences; Horticulture
	Vienna University of Economics and Business Administration	Budapest University of Economic Sciences	1991	Research Student	Business/Economics
	Vienna Veterinary University	University of Veterinary Science	1977	Research Student	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
LITHUANIA	University of Salzburg	University of Vilnius	1990	Research Student	
POLAND	Karl-Franzens University of Graz	Silesian University	1992	Research	Mathematics
		University of Wroclaw	1991	Research Student	Philosophy; Sociology; Mathematics
	Linz University	Central School of Commerce	1991	General Research Student	
		Jagiellonian University	1992	General Research Student	
	University of Salzburg	Jagiellonian University	1975	Research	
	University of Vienna	University of Warsaw	1977	General Research	Business/Economics Humanities; Law; Medicine
SLOVAKIA	Karl-Franzens University of Graz	Comenius University of Bratislava	1991	General Research Student	Chemistry; Theology
	University of Vienna	Comenius Univeristy of Bratislava	1990	General Research	Humanities; Law; Medicine
	Vienna Agricultural University	College of Agriculture	1992	General Research Student Training	Agriculture
	Vienna University of Economics and Business Administration	School of Economics in Bratislava	1990	Research Student	Business/Economics
	Vienna Veterinary University	University of Veterinary Medicine in Kosice	1991	Research Student	
SLOVENIA	Karl-Franzens University of Graz	University of Ljubljana	1990	General Research Student	
		University of Maribor	1992	General Research Student	Law

Austria (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Klagenfurt University	University of Ljubljana	1981	General Research Student	
	Vienna Agricultural University	University of Ljubljana	1991	Research Student	Biotechnology
	Vienna University of Economics and Business Administration	University of Maribor	1992	Research Student	Business/Economics

Belgium

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	Free University of Brussels	Academy of Medicine		Training	Medicine
		Bulgarian academy of Sciences	1993	Research	Astronomy
		Bulgarian Academy of Sciences	1993	Research	Chemistry
		Bulgarian Academy of Sciences	1993	Research	Engineering
		International Academy of Architecture	1988	General Research	
		University of Sofia		General	Chemistry; Physics; Thermodynamics
	University Center of Antwerp	Bulgarian Academy of Sciences	1992	Research	Chemistry; Physics
CZECH REPUBLIC	Faculte Polytechnique de Mons	Technical University of Mining and Metallurgy of Ostrava	1989	Research Student	Applied Sciences
	Free University of Brussels	Charles University	1990	Student	Literature

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Czech Technical University	1991	General	Engineering
	University Center of Antwerp	Charles University	1991	Research	International Trade; Business/Economics
	University of Liege	Czech Academy of Sciences	1992	Research Training	Ecology
		Czech Academy of Sciences	1975	Research	Civil Engineering
		Czech Technical University	1985	Research Student	Civil Engineering
HUNGARY	Free University of Brussels	Semmelweis University of Medicine	1976	Research Student	Medicine
	University Center of Antwerp	Budapest University of Economic Sciences	1991	Research Training	Business/Economics
		Hungarian Academy of Sciences		Research	Chemistry; Languages
		Hungarian Academy of Sciences	1986	Research	Physics
	University Faculties of Notre-Dame De La Paix	Attila Jozsef University	1993	Research	Chemistry
	University of Liege	Lorand Eotvos University	1991	Research	Management Science
		Lorand Eotvos University	1989	Research	Photosynthesis
		Technical University of Budapest	1980	Research	Applied Sciences
		Technical University of Budapest	1980	Research Student	Civil Engineering
		Technical University of Miskolc	1985	Research	Civil Engineering
LATVIA	University Center of Antwerp	Latvian Academy of Medicine	1991	Research Training	Surgery

Belgium (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
LITHUANIA	Free University of Brussels	Kaunas University of Technology	1991	General	Engineering
	University Center of Antwerp	University of Vilnius	1992	Research	Business/Economics
POLAND	Catholic University of Louvain	Catholic University of Lublin	1973	General Research	Business/Economics
		University of Warsaw	1981	General Research	Business/Economics
		University of Wroclaw	1978	General Research	Business/Economics
	Faculte Polytechnique de Mons	Institute of Fundamental Technological Research	1990	Research Student	Applied Sciences
		Poznan Technical University	1988	Research Student	Applied Sciences
		Silesian Technical University	1987	Research Student	Applied Sciences
		Stanislaw Staszic Academy of Mining and Metallurgy	1987	Research Student	Applied Sciences
	Free University of Brussels	Adam Mickiewicz University in Poznan	1992	General	Agriculture
		Adam Mickiewicz University in Poznan	1993	General Research	
		Child's Health Center	1992	Research Student Training	Pediatric Medicine
		Institute of National Economy	1990		Business/Economics
		Silesian University	1991	General	Geology
		Wroclaw Technical University	1992	Research	Mathematics

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Universitaire Instelling Antwerpen	H. Niewodniczanski Institute of Nuclear Physics		Research	
	University Center of Antwerp	Catholic University of Lublin		Research	Romance Languages
		H. Niewodniczanski Institute of Nuclear Physics		Research	Physics
		Jagiellonian University		Research	Mathematics
		Polish Academy of Sciences		Research	Chemistry
		University of Gdansk	1989		
		University of Warsaw		Research	Physics, Mathematics
		Wroclaw Technical University		Research	Pharmacology
	University Faculties of Notre-Dame De La Paix	Academy of Mining and Metallurgy	1993	Research	Mathematical Control Theory
		Silesian University	1993	Research	
	University of Liege	Adam Mickiewicz University in Poznan	1985	Research Student	Physics
		Adam Mickiewicz University in Poznan	1986	Research	Humanities, Linguistics
		Jagiellonian University	1992	Research	Analysis, Mathematics
		Polish Academy of Sciences	1985	Research Training	Physics
		Silesian Technical University	1983	Research Student	Applied Sciences
		University of Wroclaw	1983	Research Training	Physics
ROMANIA	Faculte Polytechnique de Mons	Bucharest Polytechnic Institute	1992	Research Student	Applied Sciences
	Free University of Brussels	Babes-Bolyai University of Cluj-Napoca	1993	Research	Chemistry

Belgium (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Babes-Bolyai University of Cluj-Napoca	1993	Research	Physics
		Babes-Bolyai University of Cluj-Napoca	1993	Research	Chemistry
		Bucharest Polytechnic Institute	1990	General	Chemistry
		Institute for Geodesy, Photogrammetry, Cartography and Land Mment	1991	General	Mining Engineering
		Romanian Academy	1993	Research	Physics
		Technical University of Cluj-Napoca	1990	General Research	
		University of Bucharest	1993	Research	Mathematics
		University of Craiova	1990	General	Physics
	Universitaire Instelling Antwerpen	Institute of Atomic Physics		Research	Physics
	University Center of Antwerp	University of Bucharest		Research	Mathematics
	University of Liege	Institute of Construction	1965	Research	Civil Engineering
		Technical University of Timisoara	1986	Research Student	Civil Engineering
SLOVAKIA	University of Liege	Slovak Academy of Sciences	1980	Research	Civil Engineering
		Technical University of Bratislava	1990	Research Student	Civil Engineering
YUGOSLAVIA	Free University of Brussels	University of Belgrade	1983	General	Physics

Denmark

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
HUNGARY	Roskilde University	Technical University of Budapest	1991		Physical Planning
	Technical University of Denmark	Technical University of Budapest	1989	Research Student	Mathematics; Physics; Engineering
LATVIA	Technical University of Denmark	Riga Technical University	1991	Research	Engineering Economics; Building Materials; Ergonomics
	University of Aarhus	University of Latvia	1992	Research Student	Political Science; Business/Economics
LITHUANIA	Aalborg University	University of Vilnius	1990	Research Student	
		Vilnius Technical University	1990	Research Student	Business/Economics Technical Sciences
	Technical University of Denmark	Kaunas University of Technology	1991	General Research Student	Technology
POLAND	Aalborg University	Technical University of Gdansk	1984	Research Student	Business/Economics Technical Sciences
		University of Warsaw	1984	Research Student	Business/Economics
	Roskilde University	Jagiellonian University	1990		Geography
		Polish Academy of Sciences	1990		Geography
		University of Lodz	1992		Geography
	Roskilde University Center	Cracow Academy of Economics	1991	Research Training	Business/Economics
	Technical University of Denmark	Warsaw University of Technology	1991	General Research Student	Technology

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Finland

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	Tampere University of Technology	Sofia University of Technology	1991	Research Student	Environmental Engineering
	University of Helsinki	University of Sofia	1982	General Research	Biology; Botany
	University of Kuopio	Higher Medical Institute of Varna		Research	Pharmacology; Toxicology
		University of Varna		Research	Pharmacology; Toxicology
CZECH REPUBLIC	Tampere University of Technology	Prague Institute of Chemical Technology	1989	Research Student	Engineering
	University of Helsinki	Charles University	1984	General Research	Botany; Physics; Law; Mathematics; Medicine; Philology
	University of Kuopio	Charles University		Training	Otorhinolaryngology
	University of Tampere	Charles University	1976	Research	
ESTONIA	College of Veterinary Medicine	Estonian Agricultural University	1988	Research Student	Veterinary Medicine
		Estonian Agricultural University	1990	Research Student	
	Helsinki University of Technology	Tallinn Technical University	1989	General Research Student	Technology
	Swedish School of Economics and Business Administration	Tallinn Technical University	1992	Student	Business/Economics Teacher Training
	Tampere University of Technology	Estonian Academy of Sciences	1984	Research	Information Technology
		Tallinn Technical University	1992	Research Student	
		Tallinn Technical University	1988	Research	Information Technology
		Tallinn Technical University	1992	Training	Engineering

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Turku School of Economics and Business Administration	Tallinn Technical University	1989	Student	Business/Economics
	University of Helsinki	Estonian Agricultural University	1991	Research Student	Agriculture; Food Sciences; Forestry
		Tallinn Pedagogical University	1990	Research	
		Tallinn Technical University	1992	Research Student	Food Sciences
		University of Tartu	1989	General Research Student	Biology; Chemistry; Geology; Physics; History; Political Science; Law; Medicine; Philology; Philosophy
	University of Lapland	University of Tartu	1990	Research	Public International Law
	University of Oulu	Tallinn Technical University	1990	General	Architecture; Technical Sciences
		University of Tartu	1990	General	Business/Economics
	University of Tampere	University of Tartu	1992	Research Student	
	University of Vaasa	Tallinn Technical University	1990	Student	Business/Economics
HUNGARY	College of Veterinary Medicine	University of Veterinary Medicine	1991	Research	Veterinary Medicine
		University of Veterinary Science	1991	Research	
	Helsinki University of Technology	Technical University of Budapest	1972	General Research Student	Technology
	University of Helsinki	Lorand Eotvos University	1991	General Research	Astronomy; Pharmacology; Radiochemistry; Finno-Ugric; Law
		University of Forestry and Wood Science	1960	Research Student	Forestry
	University of Kuopio	Albert Szent Gyorgyi Medical University		Research	Pharmacology; Toxicology

Finland (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Attila Jozsef University		Research	Physiology
		Central Food Research Institute		Research	Physiology
		Faculty of Medicine; Institute of Exp. Medicine		Research	Neurology
		Hungarian Academy of Sciences		Research	Anatomy
		Hungarian Academy of Sciences		Research	Neurology
		Institute of Occupational Health		Research	Physiology
		Institute Szabadsaghegy		Training	Anesthesiology
		Lajos Kossuth University		Research	Chemistry
		Semmelweis Medical University		Research	Physiology
		Semmelweis University of Medicine		Research	Dentistry
		Semmelweis University of Medicine		Research	Forensic Medicine; Pathology
		University Medical School of Debrecen		Research	Clinical Chemistry
		University Medical School of Debrecen		Research	Anatomy
	University of Lapland	Lorand Eotvos University	1993	Training	Minority Legislation
		University of Miskolc	1980	Research Student	Law
	University of Turku	Albert Szent-Gyorgyi University	1980	General	Medicine

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Attila Jozsef University	1980	General Research Student	Business/Economics
		University of Tartu	1987	General Research Student	Business/Economics
LATVIA	Helsinki University of Technology	Riga Technical University	1992	Research Student	Technology
	Tampere University of Technology	Riga Technical University	1992		Engineering
	University of Helsinki	Latvian University of Agriculture	1992	Research Student	Agriculture, Food Sciences, Forestry
		University of Latvia	1992	General Research Student	
	University of Lapland	University of Latvia	1990	Research	Public International Law
LITHUANIA	Tampere University of Technology	Kaunas University of Technology	1992		Engineering
	University of Helsinki	Lithuanian Agricultural Academy	1992	Research Student	Agriculture, Forestry
		Lithuanian Veterinary Academy	1992	Research Student	Animal Husbandry
		University of Vilnius	1992	General Research Student	
	University of Lapland	University of Vilnius	1992	Research	Minority Rights
	University of Oulu	Kaunas University of Technology	1992	Research Student	Technical Sciences
		University of Vilnius	1992	Research Student	Library and Information Science
	University of Turku	University of Vilnius	1992	General Research Student	Business/Economics

Finland (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
POLAND	College of Veterinary Medicine	University of Agriculture in Lublin	1988	Research	Veterinary Medicine
		University of Agriculture in Lublin	1988	Research	
	Helsinki University of Technology	Warsaw University of Technology	1972	General Research Student	Technology
	Tampere University of Technology	Technical University of Lodz	1990	Research Student	
	University of Helsinki	Jagellonian University	1988	General Research	Biology; Chemistry; Geography; Political Science; Philology; Law; Mathematics
		University of Warsaw	1974	General	
	University of Kuopio	Academy of Physical Education		Research	Physiology
		Polish Academy of Sciences		Research	Pharmacology; Toxicology
		Polish Academy of Sciences		Research	Physiology
		Polish Academy of Sciences			Pharmacology; Toxicology
		Polish Academy of Sciences		Research	Pharmacology; Toxicology
		Pomeranian Medical Academy in Szczecin		Research	Dentistry
		Pomeranian Medical Academy in Szczecin		Research	Cariology; Preventive Dentistry
	University of Oulu	Polish Academy of Sciences	1989	Research	Geography; Social Geography
		Polish Academy of Sciences		Research	Botany

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Technical University of Gdansk	1988	Research	Business/Economics Architecture; Technical Sciences
	University of Tampere	University of Lodz	1976	Research	
	University of Turku	Technical University of Gdansk	1991	General Research	
ROMANIA	University of Kuopio	University of Bucharest		Research	Anatomy
		University of Bucharest		Research	Anatomy
	University of Tampere	Technical University of Cluj-Napoca	1992	Research Student	Architecture
SLOVAKIA	College of Veterinary Medicine	University of Veterinary Medicine in Kosice	1990	Research Student	Veterinary Medicine
		University of Veterinary Medicine in Kosice	1990	Research Student	
	Tampere University of Technology	Slovak Technical University in Bratislava	1993		Environmental Engineering
	University of Lapland	Slovak Academy of Sciences	1993	Research	Minority Legislation

France

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ALBANIA	University of Provence Saint Jerome	University of Tirana	1992	Research Student	Geography
BULGARIA	Jean Monnet University	Paisij Hilendarski University of Plovdiv			
	Pierre and Marie Curie University - Paris VI	Bulgarian Academy of Sciences	1980	Research Student	Medicine
		Higher Medical Institute	1993	Research Student	Medicine
		Higher Medical Institute of Sofia	1992		Medicine
		University of Sofia	1993	Research Student	Mathematics
		University of Sofia		General	
	University of Bordeaux	Bulgarian Academy of Sciences	1985	Research	Biology
	University of Limoges	Academy of Medicine	1992	Research	Physiology
	University of Paris XIII	Institute of Lasers	1991	Research	Physics
	University of Poitiers	Technical University of Sofia	1980	Research Student Training	
	University of Provence Saint Jerome	Bulgarian Academy of Sciences	1991	Research Student	
		Sofia University of Technology	1991	Research Student	Physics
CZECH REPUBLIC	Charles De Gaulle University Lille III	Charles University	1980	Research	Humanities
	Jean Moulin University - Lyon III	Prague University of Economics	1991	Research Student Training	Business Economics
	Louis Pasteur University of Strasbourg I	Charles University	1991	General Research	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Michel de Montaigne University (Bordeaux III)	Masaryk University			
	Paul Sabatier (Toulouse III)	Technical University of Mechanical and Technical Engineering	1988	Research Student Training	Automation; Electronics Engineering
	Pierre and Marie Curie University - Paris VI	Charles University	1991	Research Student	Physics; Medicine
		Charles University	1992	Research Student	Earth Sciences
		Charles University	1991	Research Student	Chemistry
		Masaryk University		General	
	University of Rennes I	Masaryk University	1988	Research	Biochemistry; Plant Biology
	University de Haute Bretagne	Masaryk University	1979	Research Student	
	University of Aix-Marseille II	Technical University of Mechanical and Textile Engineering			
	University of Aix-Marseille III	Charles University			
	University of Bordeaux I	Masaryk University	1988	General Research	
	University of Bourgogne	Masaryk University	1988	Research Student	Business/Economics Medicine
	University of Lille II	Charles University			
	University of Montpellier I	Charles University			
	University of Paris I Panthéon-Sorbonne	Charles University	1984	Research	Demography; History; Law
	University of Paris IV (Paris-Sorbonne)	Charles University			Geography; Musicology; Philosophy
	University of Paris VII	Charles University	1993	Research	Physics
	University of Paris XI (Paris-Sud)	Charles University		General	

France (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Masaryk University		General	
	University of Paris XIII	Czech Academy of Sciences	1989	Research	Chemistry
	University of Valenciennes and Hainaut-Cambresis	Charles University		Research Student	Engineering
ESTONIA	Francois Rabelais University of Tours	University of Tallinn		Training	Business/Economics Public Management
		University of Tartu		Training	Business/Economics Public Management
	University of Paris VII	Academy of Sciences	1993	Research	Physics
		University of Tartu	1993	Research	Physics
HUNGARY	Jean Moulin University - Lyon III	Lorand Eotvos University	1991	Student	
	Jules-Verne University of Picardie	Attila Jozsef University		Research	Comparative Literature, French
	Pierre and Marie Curie University - Paris VI	Attila Jozsef University	1993	Research Student	Physics
		Lorand Eotvos University	1991	Research Student	Earth Sciences
		Semmelweiss University of Medicine	1989	Research Student	
	University of Rennes I	Attila Jozsef University		Research	Philosophy
	University of Angers	Kalman Kando College of Engineering	1986	Research	
	University of Grenoble I	Lajos Kossuth University			
		Lorand Eotvos University		General	
		Semmelweiss University of Medicine			

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Lille II	Semmelweis University of Medicine		Medicine	
	University of Nice	Attila Jozsef University	1988	Research Student Training	Biology; Chemistry; Mathematics; Physics; Computer Science; French
	University of Paris I, Pantheon-Sorbonne	Lorand Eotvos University of Budapest, Law			
	University of Paris XIII	Budapest University of Economic Sciences	1992	Student Training	Psychology
	University of Provence Saint Jerome	Attila Jozsef University	1991	Research Student	Physical Anthropology
	University of Savoie	University of Debrecen	1992	General	Computer Science
	University of Savoie (Chambery)	College of Commerce and Catering	1991	Research Student	Tourism Management
		Janus Pannonius University of Pecs	1994	Research Student	Business/Economics Languages
		Lorand Eotvos University	1994	Research Student	Business/Economics Languages
	University of Toulouse I	University of Miskolc			
LATVIA	Francois Rabelais University of Tours	University of Latvia		Training	Business/Economics Public Management
	Pierre and Marie Curie University - Paris VI	Latvian Academy of Sciences	1992	Research Student	Physics
	University of Valenciennes and Hainaut-Cambresis	University of Latvia	1992	General	Business/Economics Languages
LITHUANIA	Francois Rabelais University of Tours	University of Vilnius		Training	Business/Economics Public Management
	Jean Moulin University - Lyon III	University of Vilnius	1993	Research Student Training	Business/Economics Law
	University of Limoges	University of Vilnius	1992	Research Student	Geography; French Language

France (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
MACEDONIA	Pierre and Marie Curie University - Paris VI	University of Skopje	1986	Research Student	Medicine
POLAND	Charles De Gaulle University Lille III	University of Wroclaw	1972	Research Student	Humanities
	Charles de Gaulle University of Lille III	University of Wroclaw			
	Claude Bernard University of Lyon I	Polish Academy of Sciences	1975	Research	Biology; Chemistry; Physics
		University of Lodz	1975	Research	Biology; Chemistry; Physics
	Ecole des Hautes Etudes en Sciences Sociales	University of Warsaw		General	
	Francois Rabelais University of Tours	Center for Development of Economic Education	1993	Research	Business/Economics
		Pedagogical Academy of Opole	1988	Student	Business/Economics Management
		University of Wroclaw	1992	Research Student	Business/Economics
	Institut Catholique de Paris	Catholic University of Lublin	1988	Research	Canon Law
	Jean Moulin University - Lyon III	Jagiellonian University	1991	Research	Business/Economics Languages
		University of Lodz	1993	Student Training	Business/Economics
	Jules-Verne University of Picardie	Silesian University		Research	Humanities
	Louis Pasteur University of Strasbourg I	Polish Academy of Sciences	1988	Research	Geography
	National Polytechnic Institute of Grenoble	University of Gdansk			
		University of Lodz			
		University of Warsaw			

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Wroclaw			
	Paul Valery University of Montpellier III	University of Lodz			
		University of Warsaw			
	Pierre and Marie Curie University - Paris VI	Adam Mickiewicz University in Poznan	1988	Research Student	Biology
		Institute of Atomic Energy	1987	Research Student	Mathematical Analysis
		Institute of Pomology and Floriculture	1987	Research Student	
		Jagiellonian University	1981	Research Student	Physical Chemistry
		Lodz Technical University	1988	Research Student	Mechanics
		Polish Academy of Sciences	1983	Research Student	Physics
		Technical University of Gdansk	1988	Research Student	Physics
		University of Gdansk	1986	Research Student	Physics
		University of Lodz	1982	Research Student	Mathematics
		University of Warsaw	1987	Research Student	
		Wroclaw Technical University	1975	Research Student	Chemistry
	University of Rennes I	Adam Mickiewicz University in Poznan	1988	Research Student	Biology, Environmental Studies, Materials
		University of Gdansk		Research	Medicine
		University of Wroclaw	1977	Research	Physics
		University of Wroclaw	1981	Research Student Training	Biology, Environmental Studies, Computer Science, Telecommunications

France (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Wroclaw Technical University; Advanced Technology			
	University Blaise-Pascal-Clermont-Ferrand II	University of Wroclaw			
	University of Angers	Adam Mickiewicz University in Poznan	1991	Research	
		Nicholas Copernicus University in Torun	1985	General Research Student	
	University of Auvergne-Clermont-Ferrand I	Lodz Technical University			
	University of Bordeaux I	Jagiellonian University	1968		
		University of Lodz	1991	Research	Business/Economics
	University of Caen	University of Lodz; Humanities			
		Warsaw University of Technology; Humanities			
	University of Havre	Jagiellonian University		Research	Business/Economics
		University of Gdansk		Research	Business/Economics
	University of Lille I	Adam Mickiewicz University in Poznan			
		University of Lodz			
		University of Warsaw			
		University of Wroclaw; Business/Economics			
	University of Limoges	Jagiellonian University		Research Student	French Language
		Marie Curie-Sklodowska University	1991	General Research Student	French Language

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Nicholas Copernicus Medical Academy in Cracow		Research	Medicine
		University of Gdansk		Research Student	Business/Economics
		University of Lodz	1984	Research Student	Geography
		University of Warsaw	1992	Research Student	Geography; French Language
	University of Montpellier II	University of Warsaw			
	University of Nancy II	Marie Curie-Sklodowska University			
	University of Nantes	University of Lodz	1980	Research	Business/Economics
		University of Lodz	1980	General Research	Business/Economics
		University of Warsaw	1991	Research Student	Business/Economics
	University of Nice	University of Warsaw	1979	General Research	Business/Economics
		Warsaw Agricultural University	1992	Research	
	University of Paris I Pantheon-Sorbonne	University of Lodz	1977		History of Law
		University of Warsaw	1977		Humanities; Law
	University of Paris II	University of Warsaw			
	University of Paris III Sorbonne Nouvelle	Silesian University		Research	
		University of Wroclaw		Research	
	University of Paris IV (Paris-Sorbonne)	Catholic University of Lublin		Research	History; Latin; Patristic Literature
		University of Warsaw	1973	Research	Humanities
	University of Paris VIII	Adam Mickiewicz University in Poznan	1992	Student Training	Urban Planning

France (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Paris XI (Paris-Sud)	Adam Mickiewicz University in Poznan		General Research	
		Jagiellonian University		General Research	
		University of Wroclaw		General Research	
	University of Paris XII Val-De-Marne	Academy of Physical Education	1990	Research	Physical Education
		Central School of Commerce	1991	Student	Business/Economics
		Warsaw University of Technology	1991	Research Student	Electronics; Environmental Studies
	University of Paris XIII	Adam Mickiewicz University in Poznan	1990	Research	Linguistics
		University of Warsaw	1989	Research	
	University of Poitiers	Jagiellonian University	1992	Student Training	Law
		University of Warsaw	1991	General Research Student Training	
	University of Provence, U.F.R.	University of Lodz	1974	Research	Geography
	University of Rennes-Haute-Bretagne	Adam Mickiewicz University in Poznan	1991	Research Student	Business/Economics
	University of Strasbourg III (Robert Schuman University)	University of Lodz	1977	General	Law
	University of Toulon and Var	Stanislaw Staszic Academy of Mining and Metallurgy			
	University of Valenciennes and Hainaut-Cambresis	Silesian University	1992	General	Business/Economics Languages

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ROMANIA	Charles De Gaulle University Lille III	University of Bucharest	1980	Research	Humanities
	Claude Bernard University of Lyon I	University of Medicine and Pharmacy			
	Francois Rabelais University of Tours	University of Transylvania		Training	Business/Economics
	Jules-Verne University of Picardie	University of Bucharest		Research	French Language
	Pierre and Marie Curie University - Paris VI	Institute of Medicine and Pharmacy	1980	Research Student	Medicine
		University of Bucharest	1993	Research Student	Physics
		University of Medicine and Pharmacy	1982	Research Student	Medicine
	Univerity of Rennes I	Babes-Bolyai University of Cluj-Napoca	1992	Research	Electrochemistry
		University of Sibiu	1980	Research Student Training	Business/Economics Microelectronics
	University of Angers	Al. I. Cuza University	1980	General Research Student	
		University of Timisoara	1991	General Research Student	
	University of Bordeaux	University of Galati	1980	General Research	Chemistry
	University of Haute-Alsace	Technical University of Timisoara			
	University of Havre	Dunarea de Jos University of Galati		Research	Physics; Business/ Economics Computer Science
	University of Montpellier II	University of Timisoara			
	University of Nancy II	University of Bucharest			

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France (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Nice	University of Timisoara	1992	General Research Student	Business/Economics
	University of Paris I, Pantheon-Sorbonne	University of Bucharest		Law	
	University of Paris IV (Paris-Sorbonne)	University of Bucharest	1977	Research	Humanities
	University of Paris VII	Al. I. Cuza University	1980	Student	Environmental Studies
	University of Poitiers	Academy of Economic Sciences	1992	Research Student Training	Business/Economics
		Bucharest Polytechnic Institute	1992	General Research Student Training	
	University of Provance - Aix-Marseille I	Institute of Atomic Physics; Physics			
	University of Rennes-Haute-Bretagne	University of Bucharest	1993	Student	
	University of Rouen	Babes-Bolyai University of Cluj-Napoca			
	University of Strasbourg III (Robert Schuman University)	University of Bucharest	1991	Student	Law
SLOVAKIA	Francois Rabelais University of Tours	Comenius University of Bratislava		Research Student	Geography; Architecture
	Michel de Montaigne University (Bordeaux III)	Comenius University of Bratislava			
	University of Bordeaux I	Comenius University of Bratislava	1991	General Research	
	University of Bordeaux II	Comenius University of Bratislava			

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Havre	Comenius University of Bratislava		Research Student	Business/Economics
	University of Paris XI (Paris-Sud)	Comenius University of Bratislava		General	
	University of Poitiers	Safarik University	1992	Research	Chemistry
	University of Savoie (Chambery)	Comenius University of Bratislava	1992	Research	Computer Science
	University of Strasbourg III (Robert Schuman University)	Slovak Technical University of Bratislava	1990	General	Informatics
SLOVENIA	University of Provence, U.F.R.	Slovenian Academy of Sciences and Arts	1982	Research	Geomorphology; Hydrology; Environmental Studies
YUGOSLAVIA	Pierre and Marie Curie University - Paris VI	University of Belgrade	1991	Research Student	Physics
	University of Strasbourg III (Robert Schuman University)	University of Belgrade	1984	Research	Law

Germany

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ALBANIA	University-Gesamthochschule-Siegen	University of Tirana	1989	Research Student Training	Computer Science; Engineering
BOSNIA-HERZEGOVINA	University of Mannheim	University of Sarajevo	1971	Research Student	Languages; Business/ Economics Engineering
BULGARIA	Braunschweig Technical University	Bulgarian Academy of Sciences	1991	Research	Electrochrystillization
	Johann Wolfgang Goethe University in Frankfurt	Academy of Medicine	1987	Research	Psychology; Medicine
	Ludwig-Maximilian University	Academy of Medicine	1982	Research	Medicine
		University of Sofia	1988	General Research Student	
	Technical University of Dresden	Higher Institute of Architecture and Civil Engineering	1959	Research Student	
		Sofia University of Technology		Research Student	
	Technical University of Hamburg-Harburg	Sofia University of Technology	1990	Research	Engineering
	University of Bielefeld	University of Sofia	1993	Research Student	Sociology
	University of Darmstadt	Technical University of Sofia	1990	Research	Business/Economics Engineering; German; Mechanics
	University of Gottingen	Bulgarian Academy of Sciences	1993	Training	Botany
	University of Hamburg	University of Sofia	1978	General Research	Languages
	University of Karlsruhe	Technical University of Sofia	1990	General	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Paderborn	Bulgarian Academy of Sciences	1984	Research	
		University of Sofia	1984	Research	
	University of Rostock	Varna Technical University	1973	Research Student	Shipbuilding
	University of Saarland	University of Sofia	1980	General Research Student	
CROATIA	Johannes Gutenberg University	University of Zagreb	1975	General Research Student	
	Ludwig-Maximilian University	University of Zagreb	1976	Research	
	Technical University of Dresden	University of Zagreb		Research	
	University of Augsburg	Josip Juraj Strossmayer University of Osijek	1980	General	Geography; History; Languages; Pedagogy; Business/Economics Law
	University of Duisburg	University of Zagreb	1988	Research	Theoretical Physics
	University of Hamburg	University of Zagreb	1981	General Research	Business/Economics
	University of Rostock	University of Zagreb	1965	Research Student	Philology; Engineering; Medicine; Shipbuilding
CZECH REPUBLIC	Bergische Universestat-Gesamthochschule Wuppertal	Charles University		Research	Pedagogy
		Czech Technichal University	Research Student Training	Civil Engineering	
		Technical University of Mechanical and Textile Engineering		Research	Textile Technology
	Berlin University of Technology	Czech Technical University	1980	Research	Physics

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Carl von Ossietzky University of Oldenburg	Pedagogical Academy of Hradec Kralove	1988	Research Student	Pedagogy
	Eberhard-Karls University of Tubingen	Technical University of Mining and Metallurgy of Ostrava	1983	Research Student	Geology; Paleontology
	Fern University in Hagen	Technical University of Brno	1989	Research Student Training	Business/Economics
	Friedrich-Alexander University Erlangen-Nurnberg	Prague University of Economics	1992	Research Student	Business/Economics
	Johann Wolfgang Goethe University in Frankfurt	Charles University	1991	Research Student	Chemistry; Geography; Physics; Political Science; Psychology; Languages; Medicine; Theology
		Czech Academy of Sciences		Research Student	Chemistry; Languages; Medicine; Pharmacology
	Ludwig-Maximilian University	Charles University	1988	Research Student	Business/Economics
	Technical University of Braunschweig	Czech Academy of Sciences	1985	Research	History of Biochemistry
	Technical University of Dresden	Charles University		Research Student	
		Czech Technical University		General Research Student	
		Masaryk University	1984	Research	Mathematics; Geography; German; History; Art
		Masaryk University	1983	Research Student	
		Technical University of Mechanical and Textile Engineering	General Research Student		
	Technical University of Munich	Czech Technical University	1992	Research Student	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Bayreuth	Charles University	1992	Research Student	
		Czech Academy of Sciences	1987	Research Student	Low Temperature Technology; Physics
	University of Darmstadt	Czech Technical University	1987	Research Student	Physics; Mathematics; Business/Economics Engineering; German Language
	University of Dortmund	Charles University	1992	Research Student	Literature
	University of Duisburg	Czech Technical University		Mathematics	
		University of Pilsen		Research	Mathematics
	University of Gottingen	Charles University Hospital	1993	Training	Medicine
		Czech Academy of Sciences	1993	Training	Medical Physics
		Masaryk University	1993	Training	Chemistry
	University of Hamburg	Charles University	1980	General Research Student	Languages
	University of Heidelberg	Charles Univeristy	1990	General Research Student	Law; Medicine; Pharmacology
		Charles University	1990	Research Student	Law; Medicine
	University of Kaiserslautern	Czech Academy of Sciences	1987	Research	Environmental Planning
		Czech Technical University	1990	Research	Architecture
		Technical University of Brno	1990	Research	Environmental Planning
	University of Konstanz	Charles University	1991	Research Student	Sociology; Linguistics; Humanities; Literature; Mathematics

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Osnabruck	Charles University	1991	Research Student	Pedagogy
	University of Passau	Charles University	1983	Research Student	Geography; History; Languages
	University of Regensburg	Masaryk University	1989	Research Student	
	University of Rostock	Prague Agricultural University	1977	Research Student	Agriculture; Ecology
		University of Agriculture	1976	Research Student	Agriculture; Ecology
	University of Saarland	Charles University	1991	General Research Student	
ESTONIA	Berlin University of Technology	Estonian Agricultural University	1990	Research	Agriculture
	Christian-Albrechts University of Kiel	University of Tartu	1989	General	Business/Economics
		University of Tartu	1989	General	Business/Economics
	Eberhard-Karls University of Tubingen	University of Tartu	1989	Research Student	Medicine; Modern Languages
	Fern University in Hagen	University of Tartu	1990	Research	
	Technical University of Dresden	Tallinn Technical University		Research Student	
	University of Darmstadt	Tallinn Technical University	1992	Research	Computer Science; Electrical Engineering
	University of Paderborn	Tallinn Technical University		Research	
HUNGARY	Bergische Universitat-Gesamthochschule Wuppertal	Technichal University of Budapest		Research Student Training	Mechanical Engineering

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Berlin University of Technology	Technical University of Budapest	1987	Research	Biotechnology; Mathematics; Psychology; Architecture; Food Technology
		Technical University of Miskolc	1986	Research Student	Geosciences; Business/ Economics Process Engineering
	Eberhard-Karls University of Tubingen	Janus Pannonius University of Pecs	1990	Research Student	Humanities
		Medical University of Pecs	1982	Research Student	Medicine
	Fern University in Hagen	Budapest University of Economic Sciences	1991	Student Training	Business/ Economics
		Lorand Eotvos University	1991	Student Training	Business/ Economics
		Technical University of Budapest	1991	Student Training	Business/ Economics
	Free University of Berlin	Lajos Kossuth University	1986	Research	
		Semmelweis University of Medicine	1989	Research	Medicine
	Friedrich-Alexander University Erlangen-Nurnberg	Budapest University of Economic Sciences	1991	Research	Business/ Economics
	Hannover School of Veterinary Medicine	University of Veterinary Science	1976	General	Veterinary Medicine
	Johann Wolfgang Goethe University in Frankfurt	Janus Pannonius University of Pecs	1992	Training	Languages
	Justus-Liebig University of Giessen	University of Agricultural Sciences	1981	Research Student Training	Agriculture
	Otto-Friedrich University of Bamberg	Budapest University of Economic Sciences	1987	General Research	Business/ Economics
		Lorand Eotvos University	1992	General Research	Business/ Economics Humanities

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Technical University of Clausthal	University of Miskolc	1987	Research Student	Civil Engineering; Mining
	Technical University of Dresden	Istvan Szechenyi College of Technology	1972	Research Student	
		Technical University of Budapest		General Research Student	
	Technical University of Munich	Technical University of Budapest	1988	Research Student	
	University of Augsburg	Lorand Eotvos University	1990	General	Environmental Studies; Languages; Teacher Training
		Lorand Eotvos University	1990	General	Mathematics; Languages; Pedagogy
	University of Bayreuth	Hungarian Academy of Sciences	1987	Research Student	Literature
		Janus Pannonius University of Pecs	1983	Research Student	History; Business/ Economics
	University of Bielefeld	Lajos Kossuth University	1991	Research Student	Physics; Language; Linguistics; Literature
	University of Darmstadt	Lorand Eotvos University	1989	Research	History; Mathematics
		University of Veszprem	1978	Research	Chemistry; Physics; Philosophy; Business/ Economics Mechanical Engineering
	University of Dortmund	Technical University of Budapest	1991	Research Student	Literature
		University of Miskolc	1982	Research Student	
	University of Duisburg	Hungarian Academy of Sciences	1993	Research	Mathematics
		Lorand Eotvos University	1974	Research	Teacher Training

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Miskolc	1985	Student	
	University of Freiburg	Semmelweis University of Medicine	1983	Research	Medicine; Pharmacology
		University of Forestry and Wood Science	1983	Research Student	Forestry
	University of Hamburg	Budapest University of Economic Sciences	1988	Research	Business/Economics
		Lorand Eotvos University	1980	General Research	Business/Economics
		University of Forestry and Wood Science	1990	Research	
	University of Hanover	Technical University of Budapest	1991	General Research Student Training	Technical Chemistry; Engineering
	University of Heidelberg	Lorand Eotvos University	1982	General Research Student	Business/Economics Humanities
		Lorand Eotvos University	1982	Research Student	Business/Economics
		Semmelweis University of Medicine	1983	Research Student	Medicine; Pharmacology
		Semmelweiss University of Medicine	1983	General Research Student	Medicine; Pharmacology
	University of Kaiserslautern	Technical University of Budapest	1991		Mechanics
	University of Karlsruhe	Technical University of Budapest	1970	Research Student	Business/Economics Engineering
	University of Koblenz-Landau	Gyula Juhasz Higher School of Education	1991	Research Student	Languages
	University of Mannheim	Budapest University of Economic Sciences	1989	Research Student	Business/Economics
	University of Osnabruck	Lajos Kossuth University	1992	Research Student	Pedagogy

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Paderborn	Lorand Eotvos University	1986	Research Student	
	University of Passau	Budapest University of Economic Sciences	1989	Research Student	Business/Economics
	University of Rostock	Debrecen University of Agrarian Sciences	1960	Research Student	Agriculture; Ecology
		Lajos Kossuth University	1960	Research Student	Medicine
		University Medical School of Debrecen	1960	Research Student	Medicine
	University of Saarland	Hungarian Academy of Sciences	1983	Research	History
	University of Technology Aachen	Technical University of Budapest	1987	Research Student Training	Transportation Sciences
	University of Trier	Miskolc University	1991	Research Student	Law
	University of Ulm	Albert Szent-Gyorgyi Medical University	1984	Research Student	Medicine
		Semmelweis University of Medicine	1990	Research Student	Medicine
	University-Gesamthochschule-Siegen	Attila Jozsef University	1992	Research Student	Languages; Literature
		Hungarian Academy of Sciences	1983	Research	Mechanical Engineering
LATVIA	Friedrich-Alexander University Erlangen-Nurnberg	Riga Technical University	1992	Research	Engineering
	Johannes Gutenberg University	University of Latvia	1992	Research Student	
	Technical University of Dresden	Riga Technical University		Research Student	Communication

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Latvia		Research Student	
	University of Bremen	University of Latvia	1989	General Research Student	Environmental Science; Mathematics; German; Philosophy; Political Science
	University of Gottingen	Latvian Academy of Sciences	1993	Training	Chemistry
	University of Hanover	University of Latvia	1988	Research Training	Engineering
	University of Kaiserslautern	University of Latvia	1992	Research	Applied Mathematics
	University of Rostock	University of Latvia	1965	Research Student	Computer Science; Mathematics; Physics; History; Pedagogy; Philology
	Westfalische Wilhelms-University of Munster	University of Latvia	1992	General Research Student Training	
LITHUANIA	Berlin University of Technology	University of Vilnius	1991	Research	Physics
	Johann Wolfgang Goethe University in Frankfurt	University of Vilnius	1982	Research	Chemistry; Physics; Political Science; Psychology; Languages; Law; Medicine
	Technical University of Dresden	University of Klaipeda		Research Student	
MACEDONIA	Friedrich-Alexander University Erlangen-Nurnberg	University of Skopje	1973	General Research	
POLAND	Bergische Universitat-Gesamthochschule Wuppertal	Technical University of Gdansk		Research	Civil Engineering
		University of Lodz	1977	Research Student	Philosophy

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Wroclaw Technical University		Research	Chemistry
	Berlin University of Technology	Cracow Technical University	1984	Research	Process Engineering
		Polish Academy of Sciences	1988	Research	Agriculture; Ecology
		Polish Maritime Institute	1990	Research	Marine Engineering
		Research Center for Vacuum Electronics-OBREP	1982	Research	Physics; Electrical Engineering
		Technical University of Gdansk	1990	Research	Marine Engineering
		University of Szczecin	1990	Research	Computer Science; Pedagogy
		University of Wroclaw	1989		Mathematics
		Warsaw University of Technology	1986	Research	Material Science
	Carl von Ossietzky University of Oldenburg	Nicholas Copernicus University of Torun	1993	General Research Student	Business/Economics
	Christian-Albrechts University of Kiel	Academy of Physical Education in Gdansk	1986	General	Physical Education
		Adam Mickiewicz University in Poznan	1984	General	Business/Economics Medicine
		Central School of Commerce	1989	General	Business/Economics
		K. Marcinkowski University of Medical Sciences in Poznan	1990	General	Medicine
		University of Szczecin	1989	General	Business/Economics
		Warsaw Agricultural University	1990	General	Agriculture

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Darmstadt Technical University	Warsaw University of Technology	1980	General Research Student	Chemistry; Business/ Economics Architecture; Electronics; Mathematics
	Eberhard-Karls University of Tubingen	Catholic Theological Academy	1988	Research	Theology
		University of Warsaw	1979	Research	
	Free University of Berlin	Nicholas Copernicus Medical Academy in Cracow	1987	Research	Medicine
		University of Wroclaw	1990	Research Student	German
	Friedrich-Alexander University Erlangen-Nurnberg	Jagiellonian University	1982	Research Student	
		Nicholas Copernicus Medical Academya	1990	General	Medicine; Pharmacology
	Gesamthochschule Kassel	Marie Curie-Sklodowska University	1989	Research Student	Chemistry; Business/ Economics
		Pedagogical Academy	1988	Research Student	Education; Humanities
	Hannover School of Veterinary Medicine	Warsaw Agricultural University	1988	General	Veterinary Medicine
	Johannes Gutenberg University	Central School of Commerce	1990	Research Student	Business/Economics
		University of Warsaw	1988	General Research Student	
	Justus-Liebig University of Giessen	University of Lodz	1978	Research Student Training	Political Science; Business/ Economics German
	Kassel University	Marie Curie-Sklodowska University	1989	Research Student	Chemistry; Business/ Economics
	Ludwig-Maximilian University	University of Wroclaw	1985	Research Student	Business/Economics
	Otto-Friedrich University of Bamberg	Adam Mickiewicz University in Poznan	1989	General Research	Business/Economics Humanities

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Nicholas Copericus University of Torun	1990	General Research	Business/Economics Humanities
	Phillips University	University of Wroclaw	1990	General	Business/Economics
	Technical University of Braunschweig	Jagiellonian University	1980	Research Student	Zoology
	Technical University of Clausthal	Stanislaw Staszic Academy of Mining and Metallurgy	1980	Research Student	Business/Economics
	Technical University of Dresden	Pedagocical Academy of Cracow	1968	Research Student	
		Pedagogical Academy of Zielona Gora	1982	Research Student	
		Technical University of Gdansk	1977	Research Student	Transport
		Technical University of Lodz		Research Student	Textile Technology
		University of Szczecin	1986	Research Student	
		Warsaw University of Technology		Research Student	
	Technical University of Hamburg-Harburg	Technical University of Lublin	1989	Research	Engineering
	Universitat-Gesamthochschule-Paderborn	Polish Academy of Sciences	1987	Research	
	University of Bayreuth	Adam Mickiewicz University in Poznan	1989	Research Student	Chemistry; Geography; Physics; Business/ Economics
	University of Bielefeld	Adam Mickiewicz University in Poznan	1993	General Research Student	
		University of Warsaw	1990	Research Student	Sociology; Psychology
		University of Wroclaw	1989	Research	Physics

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Dortmund	Szczecin Technical University	1982	Research Student	Literature
	University of Duisburg	Pedagogical Academy of Zielona Gora		Research	Teacher Training
	University of Gottingen	Polish Academy of Sciences	1993	Training	Medicine
	University of Hamburg	Technical University of Gdansk	1982	Research	Shipbuilding
		University of Warsaw	1983	Research	Languages
	University of Hanover	Adam Mickiewicz University in Poznan	1983	General Research Student Training	Geology; Mineralology; German; History; Pedagogy
		Poznan Technical University	1982	General Research Student Training	Technical Chemistry; Architecture; Engineering
		Technical University of Gdansk	1987	Research Training	Engineering
	University of Heidelberg	Jagiellonian University	1989	General Research Student	
		Jagiellonian University	1989	Research Student	Law
	University of Kaiserslautern	Technical University of Gdansk	1986	Research Student	Civil Engineering
	University of Karlsruhe	Technical University of Gdansk	1982	Research Student	Business/Economics Engineering
	University of Koblenz-Landau	Higher School of Education in Czestochowa	1990	Research Student	Languages; Political Science
		Higher School of Education in Slupsk	1991	Research	Education
	University of Konstanz	Academy of Economics in Poznan		General Research	Biology

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Warsaw	1983	General Research Student	Business/Economics Humanities; Law
	University of Osnabruck	Adam Mickiewicz University in Poznan	1989	Research Student	Biology; Environmental Studies
		Jagiellonian University	1990	Research Student	Mathematics
		Pedagogical Academy of Zielona Gora	1990	Research Student	Sociology; German Language
		Silesian University	1990	Research Student	Physics
	University of Paderborn	Academy of Economics in Poznan	1991	Research Student	Business/Economics
		Rzeszow Technical University		Research	
		University of Warsaw	1987	Research	
	University of Passau	University of Lodz	1991	Research Student	German Literature; Linguistics
	University of Regensburg	University of Lodz	1992	Research Student	
	University of Rostock	Academy of Agriculture in Szczecin	1976	Research Student	Ecology; Environmental Studies; Agriculture
		Academy of Agriculture of Wroclaw	1974	Research Student	Ecology; Environmental Studies; Agriculture
		Medical University of Szczecin	1966	Research Student	Medicine
		Nicholas Copernicus University of Torun		Research Student	Chemistry; Computer Science; Mathematics History
		Szczecin Technical University	1970	Research Student	Shipbuilding
		Technical University of Gdansk	1964	General	Chemistry; Engineering; Shipbuilding

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Gdansk	1976	Research Student	Biology; Philology; Engineering; Medicine; Shipbuilding
		University of Gdansk	1976	Research Student	Biology; Philology
		University of Szczecin	1986	Research Student	History
	University of Saarland	Adam Mickiewicz University in Poznan		Research	
		K. Marcinkowski University of Medical Sciences in Poznan	1983	Research	Medicine
		University of Warsaw	1983	General Research Student	
	University of Technology Aachen	Lodz Technical University	1986	Research Student Training	Engineering; Urban Planning
		Silesian Technical University	1987	Research Student	Engineering; Metallurgy
		Technical University of Gdansk	1983	Research Student Training	Chemistry; Hydrogeology; Engineering; Maritime Technology
		Warsaw University of Technology	1976	Research Student Training	Building Materials; Electronics
	University of Trier	Academy of Economics in Katowice	1989	General	Mathematics; Business/ Economics
		Silesian University	1984	General	Business/Economics
	University of Ulm	K. Marcinkowski University of Medical Sciences in Poznan	1989	Research Student	Medicine
	University-Gesamthochschule-Siegen	Polish Academy of Sciences	1987	Research	
		University of Warsaw	1990	Research	Physics

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Wroclaw	1992	Research Student	German Literature; Languages
	Westfalische Wilhelms-Universitat Munster	Central School of Commerce	1980	Research Training	Business/Economics
		Oskar Lange Academy of Economics in Wroclaw	1984	Research Student Training	Business/Economics
	Westfalische Wilhelms-University of Munster	Nicholas Copernicus Medical Academy in Cracow	1987	Research Student Training	Medicine
ROMANIA	Bergische Universesitat-Gesamthochschule Wuppertal	Romanian Academy		Research	Complex Analysis
		University of Transylvania		Research Student	Civil Engineering
	Eberhard-Karls University of Tubingen	Babes-Bolyai University of Cluj-Napoca	1975	Research Student	Behavioral Sciences
	Fern University in Hagen	Babes-Bolyai University of Cluj-Napoca	1980	Research	
	Justus-Liebig University of Giessen	Academy of Agricultural and Forest Sciences	1980	Research	Agriculture
		Ion Ionescu de la Brad Institute of Agriculture	1980	Research	Agriculture
		N. Balescu Institute of Agriculture	1980	Research	Agriculture
	Technical University of Hamburg-Harburg	Dunarea de Jos University of Galati	1992	Research	Engineering
	Technical University of Munich	University of Timisoara		Research	Agriculture; Medicine
	University of Augsburg	Al. I. Cuza University	1991	General	Mathematics; Physics; Literature; Philology; Business/Economics; Theology

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Darmstadt	Bucharest Polytechnic Institute	1974	Research Student	Chemistry; Mathematics; Business/Economics; Computer Science; Engineering
	University of Duisburg	Institute of Oil and Gas in Ploiesti	1991	Research Student	Industrial Engineering
		University of Bucharest	1990	Research	
	University of Freiburg	Al. I. Cuza University	1975	Research	History; Ethnology; Linguistics
		University of Medicine and Pharmacy	1975	Research	Chemistry; Physics; Medicine; Pharmacology
	University of Gottingen	Romanian Academy	1993	Training	Botany
		University of Bucharest	1993	Training	Chemistry
	University of Hamburg	University of Bucharest	1975	General Research	
	University of Konstanz	Al. I. Cuza University	1993	General Research Student Training	History; Languages; Literature
SLOVAKIA	Bergische Universitat-Gesamthochschule Wuppertal	Kosice Technical University	1982	General Research Student	Biotechnology; Microelectronics; Literature; History; Mechanical Engineering
	Technical University of Dresden	College of Forestry and Wood Technology		General Research Student	
		Kosice Technical University		Research Student	
		Slovak Technical University in Bratislava		Research Student	
		University of Transport and Telecommunications	1960	Research Student	
	Technical University of Munich	Slovak Technical University in Bratislava		Research Student	Civil Engineering
	University of Bayreuth	Safarik University	1990	Research Student	History; Business/ Economics

Germany (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Darmstadt	Slovak Technical University in Bratislava	1990	Research Student	Chemistry; History; Business/Economics; Engineering; Material Science
	University of Gottingen	College of Forestry and Wood Technology	1993	Training	Forestry
		Slovak Academy of Sciences	1993	Training	Physics
	University of Osnabruck	Comenius University of Bratislava	1992	Research Student	Pedagogy
SLOVENIA	Eberhard-Karls University of Tubingen	University of Ljubljana	1981	Research	
	Friedrich-Alexander University Erlangen-Nurnberg	University of Ljubljana	1992	General Research	Engineering
	Phillips University	University of Maribor	1982	General	Business/Economics
	Technical University of Clausthal	University of Ljubljana	1982	Research Student	Business/Economics; Engineering
	Technical University of Dresden	University of Ljubljana		Research	
	University of Bayreuth	University of Maribor	1984	Research Student	Geography; Business/Economics
	University of Leipzig	University of Ljubljana	1969	General Research	Business/Economics
	University of Osnabruck	University of Ljubljana	1992	Research Student	Pedagogy
	University of Regensburg	Faculty of Theology in Ljubljana	1980	Research	Theology
		University of Ljubljana	1976	Research Student	Business/Economics; Law
YUGOSLAVIA	University of Hamburg	University of Belgrade	1978	Research	Business/Economics

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Regensburg	University of Novi Sad	1977	Research	

Greece

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ALBANIA	University of Macedonia	University of Tirana	1992	Research Student	Business/Economics
BULGARIA	University of Macedonia	D. Tsenov Economic University	1986	Research	Business/Economics
		University of National and World Economics	1992	Research	Business/Economics
	University of Patras	"Paisij Hilendarski" University of Plovdiv	1987		
CZECH REPUBLIC	Athens University of Economics and Business	Prague School of Economics	1991	Research	Business/Economics
SLOVAK REPUBLIC	University of Macedonia	School of Economics in Bratislava	1991	Research Student	Business/Economics
YUGOSLAVIA	University of Macedonia	Kragujevac University		Research Student	Business/Economics

Ireland

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	University College	Bulgarian Academy of Sciences; Comparative Urban History			
POLAND	University College	Nicholas Copernicus University of Torun		Comparative Urban History	
		Polish Academy of Sciences			
		Polish Academy of Sciences		Research	Mathematics
		Polish Academy of Sciences		Comparative Urban History	
		University of Agriculture in Lublin			
		University of Warsaw		Research	Theoretical Physics
		University of Warsaw			
		University of Warsaw; Polish Academy of Sciences	1980	Research	
	University College Galway	University of Wroclaw	1988	Research Training	Development Planning; Business/Economics Medicine; Pharmacology
ROMANIA	University College	Romanian Academy		Research	Comparative Urban History
SLOVAKIA	University College	Slovak Academy of Sciences; Comparative Urban History			
SLOVENIA	Dublin City College	Boris Kidric Institute	1984	Research	Analytical Chemistry

Italy

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ALBANIA	University of Milan	Polytechnical University of Tirana	1992	Research	Geology
	University of Padova	University of Tirana	1991	General	
BULGARIA	University of Cagliari	University of Sofia		Research	Mathematics
CROATIA	University of Padova	University of Zagreb	1976	General	
	University of Trieste	University of Rijeka	1975	Research	Various
		University of Rijeka	1975	Research	
		University of Split	1985	Research	Law
		University of Zagreb	1976	Research	
		University of Zagreb	1976	Research	
CZECH REPUBLIC	University of Ancona	Czech Technical University	1992	Research Student	Engineering
	University of Bologna	Czech Academy of Sciences	1993	Training	Chemistry
	University of Cagliari	Czech Academy of Sciences	1989	Research	Biology
	University of Cassino	Technical University of Mining and Metallurgy of Ostrava	1993	Student	
	University of Padova	Charles University	1977	General	
	University of Pavia	Institute of Scientific ' Instruments-Czech Academy of Sciences	1990	Research	
	University of Siena	Charles University	1989	Research Student	Biology; Mathematics; History; Medicine; Law
	University of Verona	Czech Academy of Sciences	1987	Research	Business/Economics

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Italy (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
HUNGARY	University of Cagliari	Lajos Kossuth University		Research	Philosophy
		Technical University of Heavy Industry	1992	Research	Mining Engineering
	University of Padova	Lorand Eotvos University	1977	General	
		Semmelweis University of Medicine	1981	General	
	University of Trieste	Budapest University of Economic Sciences	1987	Research Student	Business/Economics Languages
		Budapest University of Economic Sciences	1987	Research Student	Business/Economics
		Budapest University of Economic Sciences	1989	Research Student	Languages
		Miskolc University	1989	Research	Law; Mathematics
		Semmelweis University of Medicine	1987	Research	Medicine
		Semmelweis University of Medicine	1987	Research	Medicine; Pharmacology
		Semmelweis University of Medicine	1984	Research	Pharmacology
		Technical University of Heavy Industry in Miskolc	1989	Research Student	Law
		Technical University of Heavy Industry in Miskolc	1989	Research	Mathematics
		University of Veszprem	1987	Research	Chemistry
		Veszprem University of Chemical Engineering	1987	Research	Chemistry
	University of Verona	Hungarian Academy of Sciences	1987	Research	Business/Economics

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
LATVIA	University of Padova	University of Latvia	1992	General	
LITHUANIA	University of Pavia	University of Vilnius	1988	General Research Student	Business/Economics
POLAND	University of Ancona	Medical Academy in Gdansk	1993	Research Student	Medicine
		Technical University of Gdansk	1992	Research Student Training	Business/Economics
	University of Bologna	Polish Academy of Sciences	1992	Research	Political Science
		Silesian University	1993	Research	
		University of Warsaw	1992	Research	Business/Economics
	University of Modena	Marie Curie-Sklodowska University	1965	General Research	
	University of Padova	Jagiellonian University	1981	General	
		Nicholas Copernicus University of Torun	1981	General	
		Silesian University	1991	Research	
		University of Warsaw	1980	General	
		University of Warsaw-Bialystok	1992	Research	
	University of Pavia	Technical University of Lodz	1985	Research Student	Chemistry; Architecture; Engineering
	University of Perugia	Medical Academy in Poznan	1993	Student	Biotechnology; Parasitology; Medicine
		Medical Academy in Wroclaw	1993	Research Student	Biotechnology; Medicine
		Oskar Lange Academy of Economics in Wroclaw	1986	Research	Business/Economics
	University of Siena	Central School of Commerce	1990	Research	Demography; Statistics

Italy (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Jagiellonian University	1987	Research	Molecular Biology
	University of Trieste	Academy of Economics in Poznan	1986	Research	Economics
		Academy of Economics in Poznan	1986	Research	Business/Economics
		University of Wroclaw	1978	Research	Medicine
		University of Wroclaw	1978	Research	Mathematics; Medicine
		University of Wroclaw	1978	Research	Mathematics
	University of Verona	University of Warsaw	1982	General	Business/Economics
ROMANIA	Politechnic of Turin	Bucharest Polytechnic Institute	1991	Research	
	University of Cagliari	Al. I. Cuza University	1985	Research	Mathematics
	University of Milan	Institute of Atomic Physics	1991	Research	Physics
	University of Perugia	Athenaeum University	1993	Research Student	Agriculture
	University of Trieste	Dunarea De Jos University of Galati	1993	Research	Engineering
		University of Galati	1993	Research	Engineering
SLOVAKIA	University of Perugia	Comenius University of Bratislava	1985	Research	Pedagogy; Medicine
SLOVENIA	University of Trento	University of Ljubljana	1985	Research Student	Business/Economics
	University of Trieste	University of Ljubljana	1978	Research	
		University of Ljubljana	1978	Research	Various
	University of Udine	University of Ljubljana	1984	General Research	

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Venice	University of Ljubljana	1986	General Research	
	University of Verona	University of Ljubljana	1990	Research	Business/Economics
YUGOSLAVIA	University of Cagliari	Kragujevac "Svetozar Markovic" University	1992	Research	Chemistry
		Kragujevac "Svetozar Markovic" University	1992	Research	Mathematics
		University of Belgrade	1990	Research	Mathematics
	University of Trieste	University of Belgrade		Research	Various
		University of Belgrade		Research	

Netherlands

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	Erasmus University of Rotterdam	University of National and World Economics	1991	Research Training	Business/Economics
	University of Amsterdam	University of Sofia	1991	General Research Student	Humanities
	University of Leiden	Cyril and Methodius University of Veliko Tarnovo	1992	Student	Informatics; Archaeology; Languages; Pedagogy; Law; Theology
CROATIA	Eindhoven University of Technology	University of Zagreb		Research Student Training	Chemistry; Chemical Engineering
CZECH REPUBLIC	Delft University of Technology	Czech Technical University	1992	General Research Student Training	Engineering
	Eindhoven University of Technology	Charles University		Research	Chemical Technology; Chemistry

Netherlands (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Technical University of Brno		Research Training	Chemistry; Physics; Engineering
	Erasmus University Rotterdam	Prague University of Economics	1991	Research	Business/Economics
	University of Amsterdam	Charles University		General Research Student	Humanities; Law; Medicine
	Utrecht University	Masaryk University	1993	General Research Student	
ESTONIA	Eindhoven University of Technology	Tallinn Technical University	1988	Student	Engineering Sciences
	University of Amsterdam	University of Tartu	1989	General Research Student	Business/Economics Humanities; Law
HUNGARY	Delft University of Technology	Technical University of Budapest	1989	General Research Student Training	Engineering
	Eindhoven University of Technology	Attila Jozsef University		Student	Mathematics
		Technical University of Budapest		Training	Various
		Technical University of Heavy Industry		Research	Mechanical Engineering
	Erasmus University Rotterdam	Budapest University of Economic Sciences	1991	Research Training	Business/Economics
	University of Amsterdam	Budapest University of Economic Sciences	1989	General Research Student Training	Business/Economics
		Lorand Eotvos University of Budapest	1989	General Research Student Training	Business/Economics Humanities

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Groningen	Budapest University of Economic Sciences	1988	General Research Student Training	Sociology; Business/ Economics; Dutch Language
		Lorand Eotvos University	1988	General Research Student Training	Languages
	University of Leiden	Lajos Kossuth University	1991	Student	Computer Science; Mathematics; Languages; Pedagogy
	Utrecht University	Lorand Eotvos University	1991	General Research Student	
	Wageningen Agricultural University	Attila Jozsef University; Microbiology			
		University of Agricultural Sciences		General Research Student	
LITHUANIA	Erasmus University Rotterdam	Institute of Economics	1993	Research	Business/Economics
POLAND	Delft University of Technology	University of Agriculture and Technology in Olsztyn		Research Training	Engineering
	Eindhoven University of Technology	Jagiellonian University		Research Student	Various; Business/ Economics
		Marie Curie-Sklodowska University		Research Training	Chemistry; Chemical Technology
		Technical University of Gdansk		Research	Chemistry; Chemical Technology
		University of Lodz; Business/Economics			
		Warsaw University of Technology		General Research Student Training	Various; Engineering

Netherlands (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Erasmus University of Rotterdam	Central School of Commerce	1993	Training	Business/Economics
	Erasmus University Rotterdam	Research Center for Statistical and Economic Analysis	1991	Research	Business/Economics
	University of Amsterdam	University of Warsaw	1988	General Research Student Training	Business/Economics Humanities
	University of Groningen	University of Wroclaw	1991	General Research Student Training	
	University of Leiden	University of Wroclaw	1991	Student	Languages
	University of Nijmegen	Catholic University of Lublin	1957	Research Training	Psychology; Sociology; Arts; Theology
		Jagiellonian University	1984	General Research Student Training	Analytical Chemistry; Physics; Psychology
	Utrecht University	University of Lodz	1991	General Research Student	
	Wageningen Agricultural University	Poznan Agricultural University	1992	General Research Student Training	
POLAND	Wageningen Agricultural University	Warsaw Agricultural University		General Research Training	
ROMANIA	Eindhoven University of Technology	Bucharest Polytechnic Institute	1991	Student Training	Chemistry; Physics; Humanities; Philosophy; Engineering
		University of Bucharest	1980		

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Erasmus University Rotterdam	Academy of Economics		Student	Business/Economics; Law
	University of Amsterdam	University of Bucharest	1991	General Research Student Training	Humanities
	Utrecht University	University "Babes-Bolyai" of Cluj-Napoca	1993	General Research Student	
SLOVAKIA	Eindhoven University of Technology	Slovak Technical University in Bratislava		Research Training	Chemistry; Physics
	Erasmus University Rotterdam	School of Economics in Bratislava	1991	Research Student Training	Business/Economics
		School of Economics in Bratislava	1991	Research Training	Business/Economics
	University of Groningen	Comenius University of Bratislava	1980	General Research Student Training	
	Wageningen Agricultural University	College of Agriculture		General Research Student	
SLOVENIA	Eindhoven University of Technology	University of Ljubljana		Student	Various; Business/ Economics Industrial Engineering
	Utrecht University	University of Ljubljana	1992	General Research Student	
	Wageningen Agricultural University	University of Ljubljana		Research Training	

Norway

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	University of Trondheim	University of Sofia	1993	Research	Linguistics
CZECH REPUBLIC	The Norwegian Institute of Technology	University of Chemistry and Technology		General Research	
	University of Oslo	Charles University	1990	Student	Political Science; Humanities; Law
		Charles University	1990	Student	Political Science; Law
	University of Trondheim	Charles University	1990	Research Student	Psychology
		Czech Academy of Sciences	1975	Research	Zoology
		Czech Academy of Sciences, Plant Ecology			
		Palacky University	1992	Research	Zoology
ESTONIA	University of Oslo	University of Tartu	1990	General Research Student	Political Science; Humanities; Law
		University of Tartu	1990	Research Student	Political Science; Humanities; Law
	University of Trondheim	University of Tartu		Research Student	Plant Ecology
HUNGARY	The Norwegian Institute of Technology	Technical University of Budapest	1991	Student	
	University of Oslo	Lorand Eotvos University	1990	Research Student	Political Science; Law
		Lorand Eotvos University	1990	General Research Student	Political Science; Law
	University of Trondheim	Lorand Eotvos University	1975	Research	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
LATVIA	The Norwegian Institute of Technology	Riga Technical University	1991		
	University of Oslo	University of Latvia	1990	General Research Student	Political Science; Humanities; Law
		University of Latvia	1990	Research Student	Political Science; Humanities; Law
LITHUANIA	University of Bergen	Vytautas Magnus University	1991	Training	English Language
	University of Oslo	University of Vilnius	1990	Research Student	Political Science; Humanities; Law
		University of Vilnius	1990	General Research Student	Political Science; Humanities; Law
POLAND	University of Oslo	University of Warsaw	1990	Student	Political Science; Humanities; Law
		University of Warsaw	1990	Student	Political Science; Law
	University of Trondheim	Nicholas Copernicus University of Torun	1990	Research Student	Mathematics; Philosophy
		Polish Academy of Sciences	1992	Research	
ROMANIA	University of Bergen	University of Tirgu-Mures	1992	Research Training	Dentistry
	University of Trondheim	Bucharest Polytechnic Institute	1990	Research	Analytical Chemistry

Portugal

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
CZECH REPUBLIC	University of Coimbra	Charles University	1987	Research	
ESTONIA	University of Lisbon	University of Tartu		Research	Anthropology; Zoology
HUNGARY	Universidade do Porto	Hungarian University of Physical Education		General Research Student	Physical Education
POLAND	Universidade do Porto	University of Lodz		General Research Student	

Spain

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	University of Barcelona	Bulgarian Academy of Sciences	1988		
	University of Madrid	University of Sofia	1988	General Research Student	Ecology; Environmental Studies; Humanities; Philology
CROATIA	University of Barcelona	Archeological Museum	1978	Research	Philology
CZECH REPUBLIC	Alcala University	Charles University	1991	Student	History; Languages
	University of Barcelona	Charles University	1992	Training	Business/Economics
		Czech Academy of Sciences	1991	Research	Business/Economics
		Czech Academy of Sciences	1988	Research	Geology

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Czech Academy of Sciences	1989	Research	Biology
	University of Las Palmas de Gran Canaria	Charles University	1991	Student	
	University of Madrid	Charles University	1992	General Research Student	Business/Economics
ESTONIA	University of Barcelona	University of Tartu	1988	Research	Chemistry
HUNGARY	Alcala University	Budapest University of Economic Sciences	1986	Student	Languages, Business/ Economics
	Universidad Complutense de Madrid	Lorand Eotvos University	1992	General Research Student	
	Universidad Politecnica de Cataluna	Technical University of Budapest	1989	Research Student	
	University of Barcelona	Hungarian Academy of Sciences	1985	Research	Geology
		Hungarian National Museum	1989	Research	Geology
		Technical University of Budapest	1992	Training	
POLAND	Autonomous University of Barcelona	University of Warsaw	1980	Research	Optics
		University of Wroclaw	1992	Research Student	Philology
	Universidad Autonoma de Madrid	University of Warsaw	1979	General Research	Biology, Engineering, Geography, Business/ Economics
	University of Barcelona	Adam Mickiewicz University in Poznan	1988	Training	Philology
		Institute for Ecology of Industrial Areas	1991		
		Jagiellonian University	1988		Humanities

Spain (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Jagiellonian University	1989	Research	Geology
		Polish Academy of Sciences	1982	Research Training	Geology
		Polish Academy of Sciences	1981	Research	Geology
		University of Warsaw	1991	Training	Biology
	University of Madrid	Adam Mickiewicz University in Poznan	1989	General Research Student	Business/Economics
		University of Warsaw	1983	General	Business/Economics
	University of Santiago de Compostela	University of Lodz	1985	Research	Chemistry; Logics; Physics; Archaeology
	University of Valencia	University of Warsaw	1985	Research	Optics
		University of Warsaw-Bialystok	1990	Research	Chemistry
	University of Valladolid	Nicholas Copernicus University of Torun	1989	Research	Chemistry; Mathematics; Physics; Business/ Economics
		University of Wroclaw	1989	Research Student	Education; History; Languages; Business/ Economics
ROMANIA	University of Barcelona	Babes-Bolyai University of Cluj-Napoca	1990	Research	Geology
		Institute of Geology and Geophysics	1990	Research	Geology
	University of Valladolid	University of Bucharest	1992	General Research Student	Business/Economics
SLOVAKIA	Autonomous University of Barcelona	Slovak Academy of Sciences	1991	Research	Physics
	University of Barcelona	Slovak Academy of Sciences	1992		Biology

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Slovak Academy of Sciences	1988	Research	Geology
	University of Madrid	Comenius University of Bratislava	1979	Research Student	Business/Economics Medicine; Pharmacology
	University of Malaga	Slovak Technical University in Bratislava	1991		
SLOVENIA	University of Barcelona	Slovenian Academy of Sciences and Arts	1987	Research	Geology
		University of Ljubljana	1991	Training	
YUGOSLAVIA	University of Valladolid	University of Kosovo in Pristina		General Research	Business/Economics

Sweden

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	Chalmers University of Technology	Bulgarian Academy of Sciences		Research	
	Lund University	Bulgarian Academy of Sciences	1992	Research Student	Geography
		Bulgarian Academy of Sciences		Research	Probability Theory
	University of Gotesborg	"Paisij Hilendarski" University of Plovdiv	1983	Research	Botany
		Bulgarian Academy of Sciences		Research	Mathematics
	University of Uppsala	Bulgarian Academy of Sciences		Research	
		University of Sofia		Research	
CROATIA	University of Gotesborg	Inter-University Centre of Postgraduate Studies	1986		Teacher Training

Sweden (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Zagreb	1985		Languages
	University of Uppsala	University of Zagreb		Research	
CZECH REPUBLIC	Chalmers University of Technology	Institute of Macromolecular Chemistry		Research	
		Technical University of Brno		Research	
	University of Gotesborg	Charles University	1987	Research	Mathematics; Scientific Theory
		Czech Academy of Sciences	1984	Research	Medicine; Political Science
	University of Uppsala	Charles University		General Research	
ESTONIA	Chalmers Institute of Technology	Estonian Academy of Sciences		Research	Superconductors
	Chalmers University of Technology	Estonian Academy of Sciences		Research	Computer Science
		Estonian Academy of Sciences		Research	Applied Mechanics
		Estonian Academy of Sciences		Research	Electrical Power Systems
		Institute of Ecology and Marine Research		Research	Image Analysis
		Tallinn Technical University	1992	Student	Signal Processing
		Tallinn Technical University		Research	Non-linear Waves
	Lund University	University of Tartu	1992	Research	
		University of Tartu	1991	Research Student Training	Medicine; Ophthalmology

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Tartu	1991	Research	Business/Economics
		University of Tartu	1991	Research Student	Social Work
		University of Tartu	1991	General Research Student Training	Medicine, Ophthalmology
		University of Tartu	1990	Research Student	Media and Communication Studies
	Royal Institute of Technology	Tallinn Technical University	1989	General Research Student Training	
	Stockholm School of Economics	University of Tartu		Training	Business/Economics Banking
	University of Gotesborg	Academy of Sciences		Research	Cybernetics
		University of Tartu		Research	Astronomy; Business/ Economics
	University of Uppsala	Tallinn Technical University		General Research	
		University of Tartu		General Research	
HUNGARY	Chalmers University of Technology	Hungarian Academy of Sciences		Research	Physics
	Lund University	Hungarian Academy of Sciences	1991	Research	Geography
		Hungarian Academy of Sciences	1991	Research	Education
	Stockholm School of Economics	Hungarian Academy of Sciences	1991	Research	Economics
	Stockholm University	Lorand Eotvos University	1986	Research	
	University of Gotesborg	Lorand Eotvos University	1977	Research	Botany; Sociology
	University of Uppsala	Attila Jozsef University		Research	Medicine

Sweden (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Budapest University of Economic Sciences		Research	Business/Economics
		Lajos Kossuth University		Research	
		Lorand Eotvos University		Research	
		Medical University of Pecs		Research	
LATVIA	Chalmers University of Technology	Latvian Academy of Sciences		Research	
		Riga Technical University		Research	
		University of Latvia		Research	
	Lund University	Latvian Academy of Sciences	1993	Research	Business/Economics
	Royal Institute of Technology	Riga Technical University	1989	General Research Student Training	
	Stockholm University	University of Latvia	1989	General Research	
	University of Gotesborg	Latvian Academy of Medicine	1990		Education; Odontology
		Latvian Academy of Sciences		Research	Chemistry
		University of Latvia	1990	Research	Biology; Physics; Business/ Economics Teacher Training
	University of Uppsala	Latvian Academy of Sciences		Research	
		University of Latvia		Research	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
LITHUANIA	Chalmers University of Technology	Institute of Physical and Technical Problems of Power Engineering		Research	
		University of Vilnius		Research	
	Lund University	Kaunas Medical Academy	1992	Research Student Training	Medicine; Ophthalmology
		University of Vilnius	1992	Research Student	Geography
		Vytautas Magnus University	1992	General Research Student Training	Medicine; Ophthalmology
	Royal Institute of Technology	Lithuanian Academy of Sciences	1989		
		University of Vilnius	1990	General Research Student Training	
		Vilnius Technical University			
	Stockholm University	University of Vilnius	1991	Research	
	University of Gotesborg	Lithuanian Academy of Sciences; Mathematics			
		University of Vilnius		Research	Physics; Business/ Economics Mathematics
		Vytautas Magnus University			
	University of Uppsala	Lithuanian Academy of Sciences		Research	
		Lithuanian Veterinary Academy		Research	
		University of Vilnius		General Research	
		Vytautas Magnus University		Research	Languages

Sweden (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
POLAND	Chalmers University of Technology	Adam Mickiewicz University in Poznan		Research	
		Institute of Nuclear Physics		Research	
		Marie Curie-Sklodowska University		Research	
		Nicholas Copernicus University of Torun		Research	
		Polish Academy of Sciences		Research	
		Poznan Technical University		Research	
		Szczecin Technical University		Research	
		Technical University of Gdansk		Research	
		University of Szczecin		Research	
		University of Warsaw		Research	
		University of Wroclaw		Research	
		Warsaw University of Technology		Research	
	Lund University	Adam Mickiewicz University in Poznan		Research	Probability and Statistical Theory
		University of Lodz	1991	Research	Social Work
	Stockholm School of Economics	Center for Social and Economic Research	1992	Research	Economics
	University of Gotesborg	Adam Mickiewicz University in Poznan	1989	Student	Business/Economics
		Medical Centre of Postgraduate Education	1984		Clinical Physiology
		Polish Academy of Sciences	1985	Research	Languages

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Polish Academy of Sciences	1985	Research	Business/Economics Mathematics; Medicine
		University of Agriculture and Technology in Olsztyn		Research	Virology
		University of Warsaw	1988	Research	Mathematics; Psychology
		University of Wroclaw		Research	Mathematics
	University of Uppsala	Adam Mickiewicz University in Poznan		Research	
		Jagiellonian University		General Research	
		Marie Curie-Sklodowska University		Research	
		Polish Academy of Sciences		Research	
		University of Warsaw		General Research	
ROMANIA	Chalmers University of Technology	Romanian Academy		Research	
	University of Gotesborg	Romanian Academy		Research	Mathematics
	University of Uppsala	Bucharest Polytechnic Institute		Research	
		Romanian Academy		Research	
SLOVAKIA	Chalmers University of Technology	Comenius University of Bratislava		Research	
		Slovak Academy of Sciences		Research	
	University of Gotesborg	Academy of Music and Dramatic Art			
		Comenius University of Bratislava	1984	Research	Chemistry
	University of Uppsala	Comenius University of Bratislava		Research	

Sweden (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Slovak Academy of Sciences		Research	
SLOVENIA	University of Gotesborg	University of Ljubljana			Occupational Health

Switzerland

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	Neuchatel University	Bulgarian Academy of Sciences	1992	Research Student	Superconductivity
		University of Sofia	1991	Research Training	Business/Economics
CZECH REPUBLIC	Neuchatel University	Czech Academy of Sciences	1990	Research	Coordination Chemistry
	Swiss Federal Institute of Technology	Czech Technical University	1990	Research	Engineering
	University of Geneva	Charles University	1991	General Research	Crystallography; Political Science; Law; Slavonic Studies
	University of Zurich	Charles University	1991	Research Student	Business/Economics
HUNGARY	Federal Polytechnic of Lausanne	University of Veszsprem	1990	Research Student	Chemistry
	Neuchatel University	Budapest University of Economic Sciences	1990	Training	Business/Economics Entrepreneurship
	Swiss Federal Institute of Technology	Lorand Eotvos University	1990	Research	Applied Physics
		Technial University of Budapest	1987	Research Student	Engineering

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Agriculture in Lausanne	University of Horticulture and Food Industry	1993	Research Student	Food Sciences; Horticulture
	University of Lausanne	Lajos Kossuth University	1992	Research Student	Chemistry
	University of St. Gallen	Budapest University of Economic Sciences	1992	Training	Business/Economics
POLAND	Neuchatel University	Central School of Commerce	1991	Research	Business/Economics Marketing
		Marie Curie-Sklodowska University	1980	Research	Surface Chemistry
		O. Lange Academy of Economics in Wroclaw	1983	Research	Business/Economics
	Swiss Federal Institute of Technology	Academy of Agriculture	1983	Research	Rural Engineering
		Jagiellonian University	1975	Research	Nuclear Physics
		Silesian University	1977	Research	Physics
		Warsaw University of Technology	1971	Research Student	Engineering
	University of Geneva	University of Warsaw		General Research Student	
	University of Lausanne	University of Wroclaw	1983	Student	Business/Economics Languages
		University of Wroclaw	1983	General Student	
ROMANIA	Federal Polytechnic of Lausanne	Bucharest Polytechnic Institute	1990	Research Student	
	University of Geneva	Babes-Bolyai University of Cluj-Napoca		Research Student	Chemistry; Crystallography; Psychology; Linguistics
	University of Zurich	Babes-Bolyai University of Cluj-Napoca		Research Student	Humanities; Languages

Switzerland (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
SLOVAKIA	Neuchatel University	Slovak Technical University in Bratislava	1991	Research Student	Organic Chemistry
	Swiss Federal Institute of Technology	Slovak Technical University	1992	Research	Engineering
YUGOSLAVIA	Federal Polytechnic of Lausanne	University of Belgrade	1988	Research Student	

Turkey

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ALBANIA	Cukurova University	Agricultural University of Tirana	1991	Research Training	
BOSNIA-HERZEGOVINA	Mimar Sinan University	University of Sarajevo	1983	Research	Architecture
	Selcuk University	University of Banjaluka	1991	General Research Training	
BULGARIA	Trakya University	Paisij Hilendarski University of Plovdiv	1992	Research Student Training	Biology; Chemistry; Physics; Computer Science; Engineering
		Academy of Medicine	1991	Research Student Training	Medicine
		Higher Medical Institute	1991	Research Student Training	Medicine
		Higher Medical Institute	1991	Research Student Training	Medicine

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Sofia	1992	Research	Earthquake Engineering
	Uludag University	Higher Institute of Agriculture	1993	Research Training	Business/Economics
HUNGARY	Ankara University	University of Agricultural Sciences	1989	Research	Hydrology; Soil Science
MACEDONIA	Istanbul Technical University	University of Skopje	1993	Research Training	Engineering
POLAND	Cukurova University	Hugo Kollataj University of Agriculture in Cracow	1991	Research Student Training	
		Nicholas Copernicus University of Torun	1991	Research Student Training	Medicine
		Warsaw Agricultural University	1991	Research Student Training	
ROMANIA	Uludag University	Gheorghe Asachi Polytechnic	1993	Research Training	Engineering
YUGOSLAVIA	Trakya University	Kragujevac 'Svetozar Markovoc' University	1980	Research Student Training	Biology; Chemistry; Medicine

United Kingdom

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
BULGARIA	De Montfort University	University of National and World Economics	1989	Research Training	Business/Economics
	Keele University	Bulgarian Academy of Sciences	1991	Research	Poetics; Russian Literature
	Napier University	Bulgarian Academy of Sciences	1991		Biology
		Sofia University of Technology	1992		Engineering
	Oxford (Bodleian Library)	University of Sofria			
	South Bank University	Cyril and Methodius University of Veliko Tarnovo		Training	Business/Economics
	The Nottingham Trent University	Varna University of Economics	1992	Training	Business/Economics
	University of Brighton	University of Sofia		Research	
	University of Dundee	Bulgarian Academy of Sciences	1993	Research	Remote Sensing
		University of Sofia	1993	Research	Engineering
	University of Durham	University of Sofia	1988	Student	Russian Language
	University of Edinburgh	University of Sofia	1990	Research	
	University of Essex	University of Sofia		Research	Law
	University of Humberside	University of National and World Economics	1992		Business/Economics
	University of Leeds	University of Sofia	1960	General Research Student Training	Business/Economics
	University of Nottingham	Bulgarian Academy of Sciences	1985	Research	Archeology
		Mining and Geology University	1992	Research	Mineral Engineering

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Plymouth	Bulgarian Academy of Sciences	1982	Research	Archeo- and Paleomagnetism
		University of Sofia	1990	Research	Psychology
	University of Strathclyde	University of Sofia		General Research	Agricultural Organization
	University of Sunderland	Institute of Economics and Law	1993	Training	Business/Economics, Law
		Technical University of Sofia	1993	Training	Business/Economics
CROATIA	Oxford (Bodleian Library)	University of Zagreb			
	University of Dundee	University of Zagreb	1992	Research	Engineering
	University of Nottingham	University of Zagreb		General	Serbo-Croat Language
	University of Reading	Josip Juraj Strossmayer University of Osijek	1993	Research	Construction
CZECH REPUBLIC	De Montfort University	Charles University	1988	Research	
		Czech Academy of Sciences	1991	Research	Medicine; Pharmacology; Toxicology
	Lancaster University	Central European University	1991		
		Charles University		Research	Religious Studies
	Oxford (Bodleian Library)	Palacky University	1968		
		University of Brno			
	South Bank University	Czech Technical University	1991	Training	Business/Economics
	The Queen's University of Belfast	Czech Academy of Sciences	1992	Research	Business/Economics
	University of Brighton	Masaryk University		Research	

United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Technical University of Brno			
		Technical University of Brno		Student	
	University of Cambridge	Czech Academy of Sciences	1992	Research	Business/Economics
	University of Dundee	Charles University	1990	General Research	Medicine
	University of Durham	Palacky University	1993	Student	History; English Literature
	University of East London	Charles University	1991	Training	Environmental Studies
	University of Edinburgh	Institute of Chemical Technology in Pardubice	1981	Research	
	University of Essex	Czech Academy of Sciences	1993	Research	Engineering
	University of Leeds	Masaryk University	1960	General Research Student Training	Business/Economics
	University of Liverpool	Research Institute of Agricultural Economics	1992	Research	Economics; Rural Sociology
	University of Nottingham	Czech Academy of Sciences	1992	Research	Chemical Physics
		Czech Academy of Sciences	1991	Research	Cultural Studies
	University of Paisley	Czech Technical University	1975		
		Institute for Informatics in Education			
	University of Plymouth	Geophysical Institute	1985	Research	Geological Sciences
	University of Strathclyde	Czech Academy of Sciences			

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		Palacky University	1980	Research	Natural Products for Medicine
		Prague University of Economics		Research Training	Business/Economics
		Technical University of Brno		Research Student Training	Architecture; Building and Construction
	University of Westminster	Charles University	1991	Research Training	Biotechnology
		Czech Technical University	1992		Urban Design; Urban Planning
		University of Chemistry and Technology	1980	Research	Biotechnology
	University of Wolverhampton	Masaryk University	1980	Research Training	Languages
		Palacky University	1980	Research	Languages
ESTONIA	Oxford (Bodleian Library)	University of Tartu	1972		
	South Bank University	Tallinn Technical University	1980	Research	Biotechnology
	University of Cambridge	Academy of Sciences	1991	Research	
		Estonian Academy of Sciences	1992	Research	
	University of Humberside	Tallinn Technical University	1992	Training	Food Sciences
HUNGARY	Coventry University	University of Miskolc		Research Student	Business/Economics
	De Montfort University	Technical University of Budapest	1992	Research	Engineering
	Napier University	Budapest University of Economic Sciences	1992	Research	Regional Planning
		Ybl Miklos Polytechnic	1991	Training	Building Procurement; Property

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United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	Oxford (Bodleian Library)	Attila Jozsef University			
		Janus Pannonius University of Pecs	1960		
		Lajos Kossuth University			
		Lorand Eotvos University	1969		
	South Bank University	Attila Jozsef University	1989	Research Student	Computer Science
		Technical University of Budapest		Training	Construction Management
	The Nottingham Trent University	Budapest Univeristy of Economic Sciences	1992	Research Training	Business/Economics
		Donat Banki Polytechnic	1993	Student	
		Lorand Eotvos University	1991		Biochemistry; Biotechnology
		Semmelweis University of Medicine	1990	Research	Photobiology
		Technical University of Budapest	1985	Research Student Training	Business/Economics Engineering
		University Medical School of Debrecen	1989	Research	Biochemistry; Biotechnology
	The Queen's University of Belfast	Lorand Eotvos University	1991	Research	Philosophy
	University of Brighton	Hungarian University of Physical Education			
		Technical University of Budapest			
	University of Bristol	Lorand Eotvos University	1990	Student	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Cambridge	Budapest University of Economic Sciences	1991		Business/Economics
		Hungarian Academy of Sciences	1985	Research Student	Genetics
		Lajos Kossuth University	1991	Research	Geology; Palaeoecology
	University of Durham	Attila Jozsef University	1989	Research Student Training	English; English Literature
		Technical University of Budapest		Research	
	University of Edinburgh	Central Research Institute for Physics	1987	Research	
		Lorand Eotvos University	1985	Research	Agriculture; Chemical Technology
	University of Essex	Budapest University of Economic Sciences		Research	Economics; Sociology
	University of Humberside	College for Foreign Trade	1991		Business/Economics
	University of Liverpool	Budapest University of Economic Sciences	1993	Research	Economics; Rural Sociology
		Hungarian Academy of Sciences	1992	Research	Economics; Rural Sociology
	University of Newcastle upon Tyne	Lorand Eotvos University	1991	Research Student	
	University of Nottingham	University of Szeged	1992	Research	Clinical Pharmacy
	University of Plymouth	College of Engineering and Automation	1980	Student	Electronics
		Hungarian Academy of Sciences	1976	Research	Geological Sciences
		Lorand Eotvos University	1976	Research	Geology
		Miskolc University	1991	Research	Applied Social Science; Law

United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Strathclyde	Albert Szent Gyorgyi University	1976	Research	Cardiovascular Research
		Budapest University of Economic Sciences		General Research	Agricultural Organization
		Hungarian Academy of Sciences	1993	Research	
		Lorand Eotvos University		Research	Electronic Structures of Materials
		Lorand Eotvos University		Research	Law
		Semmelweis University of Medicine			
		Technical University of Budapest	1987	Research	Ceramic Materials
	University of Westminster	Istvan Szechenyi College of Technology		Training	Business/Economics
LATVIA	De Montfort University	Riga Technical University	1991	Training	
	University of Bristol	University of Latvia	1990	Research Training	Law
	University of Cambridge	University of Latvia	1992	Research	
LITHUANIA	Oxford (Bodleian Library)	University of Vilnius	1981		
	Saint David's University College	Lithuanian Agricultural Academy	1993	Training	Business/Economics
	South Bank University	Kaunas University of Technology	1990	Research	Food Sciences
	University of Cambridge	Lithuanian Academy of Sciences	1992	Research	
	University of Nottingham	University of Vilnius	1991	Training	Social Work

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Wolverhampton	Pedagogical Institute of Vilnius	1980	Research Student	Education
MACEDONIA	Oxford (Bodleian Library)	University of Skopje			
	University of Wolverhampton	University of Skopje	1986	Research Training	Computer Science; Engineering
POLAND	De Montfort University	Pedagogical Academy of Opole	1992		Chemistry; Environmental Monitoring
	Edinburgh University Management School	University of Lodz	1991	Research Student Training	Business/Economics
	Lancaster University	Jagiellonian University		Research Training	Sociology
	Napier University	Warsaw University of Technology	1992		Chemistry; Physical Sciences
	Oxford (Bodleian Library)	Adam Mickiewicz University in Poznan			
		Catholic University of Lublin			
		Jagiellonian University			
		Nicholas Copernicus University of Torun	1969		
		Silesian University	1979		
		University of Lodz			
		University of Warsaw			
		University of Wroclaw			
	The Nottingham Trent University	Academy of Economics in Poznan	1991	Training	Business/Economics
		Nicholas Copernicus University of Torun	1980	Training	Business/Economics
		University of Gdansk	1992	Training	Business/Economics

United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Lodz	1992	Research Student	Business/Economics
		University of Wroclaw	1992	Research	Microbiology
	The Queen's University of Belfast	Polish Academy of Sciences	1991	Research	Sociology
	University of Brighton	Academy of Economics in Cracow			
	University of Bristol	Higher College of Engineering in Zielona Gora	1990		
		Wroclaw Technical University	1990	Research Student	
	University of Cambridge	Institute of Electronic Fundamentals	1991	Research Student	Clinical Medicine
		Nicholas Copernicus University of Torun	1979		
		University of Warsaw	1992	Training	Law
	University of Central Lancashire	Catholic University of Lublin	1991	Research Training	Business/Economics
		University of Wroclaw	1992	Research Training	Business/Economics
	University of Durham	Institute of Nuclear Physics	1991	Research Student	Physics
		Polish Academy of Sciences	1990	Research Student	Archaeology
		Silesian University	1989	Research	Sociology; English; Linguistics
	University of Edinburgh	Polish Academy of Sciences	1983	Research	Computer Science
		University of Warsaw	1986	Research	
	University of Essex	Nicholas Copernicus University of Torun	1991		

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Lodz			Law
	University of Leeds	Technical University of Lodz	1960	General Research Training	Engineering; Textile Science
	University of Liverpool	Nicholas Copernicus University of Torun	1992	Research	Economics; Rural Sociology
		Polish Academy of Sciences	1992	Research	Economics; Rural Sociology
	University of Newcastle upon Tyne	Gdansk University	1990	Research	English Language and Literature
		Technical University of Gdansk	1984	Research	Marine Technology
	University of Nottingham	Polish Academy of Sciences		Research	Engineering
		University of Lodz	1990	Research	Mathematics
		University of Warsaw	1992	Research Training	Social Policy; Social Work
		University of Warsaw	1992	Research Training	Archaeology
	University of Paisley	Academy of Economics in Katowice		Research Training	Business/Economics
		Silesian International Business School			
		Technical University of Radom	1975	Research Training	
	University of Plymouth	Adam Mickiewicz University in Poznan	1990		Agriculture
		Catholic University of Lublin	1988	Research	Environmental Science
		Institute of Paleobiology	1985	Research	Biology
		Jagiellonian University	1981	Student	Architecture
		Jagiellonian University	1988	Research	Environmental Science
		University of Gdansk	1990	Training	Electronics

United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
		University of Warsaw	1988	Research	Environmental Science
		University of Warsaw	1980		Applied Social Science; Agriculture; Law
	University of Strathclyde	Gdansk Business School	1991	General Training	Management
		Medical Academy in Lodz		Research	Pharmaceutical Chemistry
		Poznan Technical University	1987	Research	Ceramic Materials
		Silesian Technical University	1987	Research	Ceramic Materials
		Stanislaw Staszic Academy of Mining and Metallurgy	1987	Research	Ceramic Materials
		Technical University of Lodz	1967	General Research	Engineering
		Technical University of Warsaw		Research	Compressor Valve Design; Engineering
		Technical University of Warsaw, Polish Academy of Sciences		Research	Thin Walled Structures
		University of Warsaw	1993	Research	
		University of Warsaw, Polish Academy of Sciences		Research Training	GIS
		University of Wroclaw	1991	General Research	Crystal Growth and Purification; Labour Markets and Trade Unions
		Wroclaw Technical University		General	Operational Research; Health
	University of Westminster	Institute of Physical Planning and Municipal Economy	1992		Business/Economics

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COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
ROMANIA	Napier University	Romanian Academy	1991	Training	Geography
	Oxford (Bodleian Library)	Al. I. Cuza University	1966		
		Babes-Bolyai University of Cluj-Napoca	1959		
		University of Bucharest	1982		
		University of Timisoara	1959		
	South Bank University	Bucharest Polytechnic Institute	1992	Research Student	
	The Queen's University of Belfast	Academy of Agriculture and Forest Sciences	1993	Research Training	Plant Protection
	University of Bristol	University of Timisoara	1988	Training	Applied Mathematics
	University of Cambridge	Babes-Bolyai University of Cluj-Napoca	1992	Research	Geology; Palaeoecology
	University of Durham	Central Institute of Physics	1992	Research	
	University of Hertfordshire	Bucharest Polytechnic Institute	1991	Research Training	Business; Economics
	University of Nottingham	Babes-Bolyai University of Cluj-Napoca		Research	Inorganic Chemistry
		Technical University of Cluj-Napoca	1992	Research	Coal Technology
		Technical University of Cluj-Napoca	1993	Research	Technology
		University of Transylvania	1993	Research	Technology
	University of Plymouth	Romanian Academy	1985	Research	Geophysics
		Babes-Bolyai University of Cluj-Napoca	1988	Research	Electronics
SLOVAKIA	De Montfort University	Slovak Technical University in Bratislava	1993	Research	Computer Science
	Oxford (Bodleian Library)	Comenius University of Bratislava			

United Kingdom (continued)

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Brighton	School of Economics in Bratislava			
	University of Essex	Comenius University of Bratislava: Chemistry			
	University of Liverpool	Research Institute of Agricultural Economics	1992	Research	Economics; Rural Sociology
	University of Nottingham	Slovak Academy of Sciences	1990	Research	Mathematics; Quantum Probability
		Slovak Academy of Sciences	1990	Research	Mathematics
	University of Strathclyde	Slovak Technical University in Bratislava		Research Student Training	Architecture; Building and Construction
	University of Sunderland	Plastics Processing and Application Research Institute	1991	Training	Materials Technology
		Slovak Technical University in Bratislava	1991	Training	Material Technology
	University of Westminster	University of Transport and Telecommunications		Research	Business/Economics
SLOVENIA	De Montfort University	University of Maribor		Research	Computer Science
	Oxford (Bodleian Library)	University of Ljubljana			
	University of Brighton	University of Ljubljana			
	University of Paisley	University of Ljubljana		Research	Computer Science; Education
		University of Maribor		Research	Computer Science; Education
YUGOSLAVIA	Oxford (Bodleian Library)	University of Belgrade			
	University of Paisley	University of Belgrade		Research	

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
	University of Strathclyde	Serbian Academy of Sciences and Arts		Research	Crystal Growth and Purification
		University of Novi Sad: Fluid Rheology			

Vatican

COUNTRY	WEST EUROPEAN UNIVERSITY	EAST CENTRAL EUROPEAN UNIVERSITY	YEAR PROGRAM BEGAN	TYPE(S) OF LINKAGES	FIELDS
CROATIA	Pontifical Gregorian University	Philosophical-Theological Institute Druzbe Isusove			
POLAND	Lateran Pontifical University	Major Seminary in Chelmno	1965	Training	Theology

Figure 1. CRE Questionnaire

CRE

Please return to:

CRE
10 Conseil Général
CH - 1211 Geneva 4
Fax +41 22 3292821

➳ ***before 26 March 1993***

SURVEY ON UNIVERSITY LINKAGES WITH INSTITUTIONS
IN CENTRAL AND EASTERN EUROPE
including the Baltic States, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia and former Yugoslavia

Please complete one form for each university linkage. Do not include TEMPUS programmes.

University: _____

Address : _____

_____

_____

University officer responsible for this programme: _____

Partner University: _____

Department/Faculty: _____

When did this programme begin? _____

Nature of cooperation: **(tick each that applies)**

- ❑ research exchange
- ❑ student exchange
- ❑ training programme for C/E Europeans
- ❑ other
  Specify: _____

Field/Specialization

- ❑ Natural Sciences
  Specify: _____
- ❑ Social Sciences
  Specify: _____
- ❑ Business/economics
- ❑ Other
  Specify: _____

Source(s) of funding

- ❑ University resources
- ❑ National government/ Science council
- ❑ Foundation
- ❑ Other

If possible, please provide a short description of the programme and its results. What was the primary impetus for this relationship ?

Canadian Programs in East Central Europe

Prepared by:

ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA

Canada has many close links with the countries of Central and Eastern Europe, where many of this nation's immigrant populations originated. Those links, once strained and limited by a political gulf, are now being renewed with enthusiasm. As democratic and capitalist institutions emerge from abandoned communist systems, many of the people building those institutions have turned to Canada for guidance, support and training.

Canadians, both personally and through their institutions, have been receptive to such requests. It is not surprising to find experienced managers returning to their parents' homelands to share their knowledge of business practice. Representatives of those same homelands likewise come to Canada to cultivate many of the skills their changing economy or political system will require, including the skill of passing on what they learn.

The Canadian government has taken an equally active interest in the future of this region, so much so that concerns are now being voiced as to whether foreign aid funding to Central and Eastern Europe will become significant enough to compromise Canada's established aid programs in the Third World. Whether such fears are realized, the Canadian ministry responsible for foreign affairs, External Affairs and International Trade Canada, has already expressed its commitment to building new political and economic structures within various countries, laying the foundation for future relations with Canada.

The tone of this commitment was set in May 1990, when then-External Affairs Minister Joe Clark announced the formation of a task force to coordinate Canada's efforts in this region. "The success of the Task Force depends as much on individuals, groups and businesses in Canada as it does on government

initiatives," he said in a subsequent publication. "Canada's multicultural community in particular—with its linguistic, cultural and social links to central and eastern Europe—is a unique asset in our efforts to provide assistance to, and pursue opportunities in, those countries."

The Canadian university and college community is also playing an integral part in this process, providing a great deal of the expert knowledge so valuable to the countries in question. Much of this activity is taking place at an individual level, through channels little different from those that enable Canadians to reach out to other parts of the world. At the same time, some programs and agencies have been set up to deal specifically with the situation found in the formerly communist nations of Europe.

The Association of Universities and Colleges of Canada, in collaboration with its 89 members, has briefly reviewed the opportunities available to Canadian academics in central and eastern Europe. This region consists of countries outside the borders of the former Soviet Union—Albania, Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and Yugoslavia—which in this paper shall be referred to as East Central Europe (ECE).

TRENDS

It has been only four years since signal events such as the reunification of Germany and the dissolution of the Soviet Union, but the Canadian academic community has witnessed several trends during that time:

- ***a shift from individual to institutional relations.*** Although personal contacts were often the only way of coping with many cumbersome ECE bureaucratic procedures, government offices and universities are now demonstrating an ability to cultivate effective faculty exchange programs or joint research initiatives. This change no doubt stems from a systematic decentralization of ECE institutions, which in some cases now have Western-educated people at the helm. While individual interaction will always remain important to Canada's relationship with ECE, the growth of a manageable infrastructure will point the way to much broader interaction, bringing in large numbers of new participants from both sides.

- ***dramatically enhanced interest from the Canadian government.*** The formation of the External Affairs Task Force has provided universities with new resources for dealing with ECE. Although the task force's mandate specifies technical assistance, the academic community has been incorporated in many projects devoted to establishing democratic and capitalist systems within the region. Although the practical, short-term nature of such projects is hardly representative of all academic interactions with ECE, they do represent the most recent and most dynamic areas of interest. Newcomers to the field could almost certainly be attracted to such work, which will have significant implications for the future direction of research and scholarship.

- ***an increasing emphasis on professional training.*** While historical or literary study continues unabated, often benefiting from improved access to reference sources in ECE, the last few years have seen a virtual explosion in the demand for programs on business practice, language, management skills and legal principles. This new demand need not displace traditional scholarly pursuits, but as an area of rapid and continuing growth it will likely attract increasing interest on the part of administrators and funding agencies.

- ***more program administration through existing agencies.*** Organizations such as the Association of Universities and Colleges of Canada (AUCC) already have a great deal of experience administering activities in ECE, and since the Canadian government is committed to using executing agencies, the External Affairs task force has been content to pass on the management of many of its programs. Such practices will probably increase with the level of activity, as funding agencies feel the need to shift some of their administrative burden. In this way, much of the authority for government-sponsored initiatives could end up in the hands of nongovernmental organizations.

- ***concentration of activity in a few ECE countries.*** For a variety of reasons, some nations have established more links or more substantial links with Canada. Hungary, Poland and what was Czechoslovakia—representing just over half the combined population of ECE—have a much higher proportion of exchanges and other activities. In

some cases, such as Albania, this imbalance has resulted from a conscious isolation from Western society, while the more complex problems within the former Yugoslavian border could pose physical danger to anyone traveling there. The recent division of Czechoslovakia will unquestionably alter many agreements with Canada, although it is not yet apparent how these changes will take place.

TYPES OF COOPERATION

Student and faculty exchanges have traditionally served as a mainstay linking the ECE and Canadian academic communities. CUE, an AUCC database listing all Canadian university international exchange agreements, cites 64 such arrangements with ECE, 38 of which specifically call for some type of exchange of people. Only eight of these agreements do not restrict exchange candidates by their discipline; among the other agreements, technical areas such as agriculture, science or engineering have been emphasized. A minority of exchanges cover the rest of the academic spectrum, including studies such as law, medicine, economics and political science. A few of the university exchange programs go back ten years or more, but most have been established since 1988 or 1989.

Individuals have also been able to find their way between Canada and ECE through other means, such as scholarships awarded by the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. Some of these awards apply specifically to people studying in ECE, while more general types of grants could be applied toward work in ECE if the individual can take care of other details. Professional Partnerships, a Canadian government program run by AUCC, facilitates this type of exchange by funding an individual's international travel costs.

Professional and technical training programs have taken on new prominence, largely because of the extensive funding opportunities now available through External Affairs and International Trade Canada. The most wide-ranging of these programs involve Canadian business schools, which run courses lasting several weeks for dozens of ECE managers, some of whom complete their visit to Canada with a brief internship at a private Canadian firm. Canadian business teachers also travel to ECE to conduct similar courses, often at facilities established by other universities, like the International Management Centre, which was set up in Budapest as early as 1987 and is currently being directed by a Canadian professor. Such activities likely represent the largest outlet for private investment, which often takes the form of in-kind contributions. Similar programs on law, though not as common as business and management, are also becoming popular.

Technical assistance programs with ECE tend to be narrowly focused, generally calling on industry or government agencies for participation. Nevertheless, members of the academic community do take part wherever their expertise can apply, as did a McGill professor who was retained to help the Hungarian government reform its pension plan. Because of their vocational emphasis, Canada's nondegree-granting colleges have been especially active in meeting some of these needs, including helping ECE educators establish curricula in journalism.

PARTICIPATING CANADIAN INSTITUTIONS

Association of Universities and Colleges of Canada (AUCC)

Representing Canada's 89 degree-granting colleges and universities, AUCC provides communications, government liaison, research resources and international relations for its membership. Since the early 1980s, the Association's International Division has been a point of contact for officials and representatives from other countries wishing to establish links with Canada's university system. AUCC believes that international cooperation among universities improves the quality of education in Canada and around the world. The Association therefore works closely with agencies and departments of the Canadian government to gain their support for universities' commitment to international cooperation and understand the contribution universities make to Canada's international role.

Working with a network of international liaison officers at member institutions, AUCC counsels universities interested in setting up new agreements and projects with universities abroad at both the institutional and the individual level. One of the

oldest and longest standing examples of individual exchanges is the Canada-U.S.S.R. exchange program, which AUCC has administered since 1987. This program stemmed from the General Agreement on Exchanges, or GENEXAG, first negotiated between the Canadian and Soviet governments in 1972. Last renewed in 1990, the program has continued to operate in Russia and the other former Soviet republics through the efforts of the Russian Academy of Sciences and the Russian Committee for Higher Education, which assumed responsibility for the exchange after the formal end of the Soviet Union.

AUCC also maintains CUE, a database containing a current listing of formal international exchange agreements in place at various Canadian universities. As of early 1993, that list included 64 agreements in ECE: 8 with Bulgaria, 9 with the Czech Republic, 9 with Hungary, 28 with Poland, 2 with Romania, 4 with Slovakia and 4 with Yugoslavia. Some agreements establish specific links with another university, while other agreements establish a much broader relationship with a government ministry or national academy of sciences. Most of those agreements are confined to disciplines such as science, engineering and agriculture, although some agreements feature fine arts, law and philosophy and eight exchange programs are unrestricted.

The database cites 21 Canadian universities having links with ECE, usually consisting of only one or two formal agreements. A comprehensive survey of university presidents indicates that the actual level of interaction can be much higher at some institutions, where informal contacts based on faculty interests have been made.

AUCC is currently administering the Professional Partnerships Program on behalf of External Affairs and International Trade Canada. This program supports academics or professionals being hosted by an organization in ECE or Canada, paying for their international travel expenses.

Task Force on Central and Eastern Europe

Set up in 1990, the Task Force represents the Canadian government's formal response to the political and economic changes taking place in ECE. Established through External Affairs and International Trade Canada, the Task Force acts as the primary instrument to coordinate public and private sector initiatives, broad-based political and economic links with ECE and administer a $75 million technical assistance program throughout ECE and the former Soviet Union.

The Task Force sponsors Renaissance Eastern Europe, a trade and industry development initiative aimed at increasing the participation of Canadian companies in the region. So far the program has worked with some 70 companies in sectors as varied as microelectronics, oil and gas, construction and pulp and paper. Such initiatives reflect the belief that political and economic progress are interdependent, with appropriate provisions made for each aspect of development. External Affairs and International Trade Canada provides a $30 million Economic Development Fund to support economic restructuring in ECE along with trade links to Canada, and a $10 million Political Cooperation Fund to promote the development of democratic institutions.

By the end of 1992, the Task Force had overseen 325 bilateral assistance projects in ECE, projects which had been approved, and were either completed or still under way. Those projects have included four in Albania, seven in Bulgaria, 79 in Czechoslovakia, 105 in Hungary, 68 in Poland, 47 in Romania and 15 in Yugoslavia. Of that total, 13 projects featured the direct or peripheral involvement of Canadian universities, including AUCC's administration of the Professional Partnerships program. Other examples include:

- Acadia University's Centre for Small Business and Entrepreneurship, which hosted a six-week training program for Hungarian managers;
- McGill University, which sent an expert to assist the Hungarian government in reforming its pension plan system;
- University of Ottawa, which hosted Polish and Hungarian commercial arbitration experts at a conference on that subject;
- Université du Québec à Montréal, which offered Romanian scholars and managers an intensive executive MBA course;
- University of Western Ontario, which for three years has run a summer school in actuarial science in Poland leading to the development of a perma-

nent actuarial specialization within the department of economics at Warsaw University;

- York University, which hosted Czech, Hungarian, Polish and Romanian managers during four summers of an East/West Enterprise exchange, including four weeks of academic training and internships with Canadian firms;
- the Canadian Consortium of Management Schools, which offers a management training and development program for Polish students, faculty and managers through the formation of a Canadian-Polish Management Centre.

Natural Sciences and Engineering Research Council (NSERC)

This federal government agency is the largest source of research funding in Canada, providing more than $400 million toward training, investigative work and university/industry collaboration. NSERC supports more than 7,000 university projects in some 120 disciplines.

The Council had a bilateral agreement with Czechoslovakia until 1989, enabling researchers from one country to travel to the other for periods ranging from a month to a year. NSERC now has no comparable agreements for ECE, but the terms of its operating and infrastructure grants can be flexible enough to permit a similar exchange of personnel. Some specific awards are also available for the same purpose:

- ***A system of international fellowships,*** established in 1990, enables postdoctoral researchers to spend up to two years in Canada. A Canadian university must sponsor each applicant, who cannot be a Canadian citizen or permanent resident and whose doctorate must have been obtained outside of Canada. NSERC has granted 21 such fellowships to ECE applicants since 1990—two from Bulgaria, two from Czechoslovakia, five from Hungary, nine from Poland and three from Yugoslavia.
- ***International scientific exchange awards*** allow Canadian researchers to support visiting researchers for one to six months. NSERC has granted 38 of these awards to ECE applicants since 1989—two from Bulgaria, seven from Czechoslovakia, 11 from Hungary and 18 from Poland.

The Council also offers postdoctoral fellowships and collaborative research grants, which Canadian researchers can take to other countries. Since 1989, however, no such awards have gone to anyone working in ECE. It would appear that while many ECE researchers want to come to Canada, few of their Canadian counterparts are keen on traveling in the other direction. NSERC notes that language and cultural difficulties act as a barrier to interaction with ECE even in the absence of many of the former political restrictions.

Social Sciences and Humanities Research Council (SSHRC)

This federal government agency promotes research, publishing and academic training in a wide variety of fields. SSHRC's Research Communication and International Relations Division is dedicated to raising the international profile of Canadian social sciences and humanities activities.

Although the Council features no specific program focused on ECE, the last two years have seen a dramatic increase in the number of successful research grant applications for work related to ECE. Only 14 such grants were awarded in 1989 and 1990, a figure that more than doubled to 41 in the next two years. Many of these projects adopt themes directly related to changes taking place in the region, such as analyses of the transition from socialist society, assessments of environmental management programs and studies of the development of market economies.

Association of Canadian Community Colleges (ACCC)

This membership organization represents Canada's 160 postsecondary, nondegree-granting educational institutions, incorporating a network of some 25,000 college instructors and administrators. Through ACCC International, established in 1979, the Association has set up more than 200 links between Canadians and institutions in 60 countries in fields such as agriculture, business, industrial safety and food processing. Through contracts and cooperative projects, ACCC's mandate directs these activities toward enhancing the capability of training agencies or technical institutions.

Through the Task Force on Central and Eastern Europe, ACCC has been active in ECE. For example, Association members have been twinned with the Czech Institute of Technology to develop an acredited postsecondary education program that could provide credit toward a university education. In Hungary, ACCC members have helped design curricula for English as a second language, journalism and tourist services. Along with partners from an Irish institution, the Association recently received a $1.5 million World Bank contract to help Hungary establish retraining programs for unemployed workers.

The Canadian Bureau for International Education (CBIE)

A registered charity founded in 1966, CBIE is a Canadian organization dedicated purely to international education. With a membership including 120 universities, colleges and other educational institutions, the Bureau supports publications and research projects as well as lobbying for international student interests. Activities undertaken by CBIE have included special services to member institutions to strengthen their ability to serve international students, research and publication of documents pertaining to international education issues, educational projects designed to bring international students to Canada and the administration of various scholarship programs.

In both 1991 and 1992 CBIE engaged three professors from member institutions—the University of Guelph, University of Victoria and Saint Mary's University—to direct a two-week training course for Czech and Slovak managers. Some of the almost 300 participants in the course, which explained how successful businesses operated in a market economy, went on to a further six-week program of study and work placements. Saint Mary's University was involved in a similar program for middle and senior level managers from the Baltics. Also, senior university administrators from the University of Bratislava visited Saint Mary's to learn about the management of higher education institutions in Canada. These activities extend a program entitled Management of Change in the Czech and Slovak Republic, which began in 1991 with some 25 Canadian firms and 8 government departments.

CBIE recently established a Centre for Central and Eastern Europe, intended to foster democratic development in ECE through institutional partnerships, technical assistance and the development of human resources and human rights. Working closely with member institutions and corporate partners, the Centre intends to assess the impact of technical assistance in ECE and share its research findings through presentations, background documents and published articles. The Centre will also explore how Canadians can best be prepared for interaction with ECE, how assistance should reflect the changing role of women in those countries and whether the development experience gained in the Third World can be applied to this region.

At the beginning of 1993, CBIE began administering Partners in Progress, an 18-month pilot project funded through External Affairs and International Trade Canada. Much of this initiative focuses on the former Soviet Union, providing as many as 150 agricultural, policy and health experts from Canada as consultants to the Russian Federation and the Ukraine. In addition, another 100 advisors will be placed in the former Soviet Union and ECE through a Human Resource Development Fund. Applicants to this fund will propose and conduct "hands-on" projects, serving as advisors to some local or regional organization for at least two months in their chosen country.

TRANS-EUROPEAN MOBILITY SCHEME FOR UNIVERSITY STUDIES (TEMPUS)

Established in 1990 by the Council of Ministers of the European Communities, TEMPUS is an initiative directed toward the development of the higher educational system in ECE. Eligible institutions, including universities and companies, can receive funding for cooperative training programs, establishing a new educational facility, or setting up a joint exchange.

In 1992, four Canadian universities took part in TEMPUS projects. The University of Western Ontario helped review medical and financial curricula in Hungary, Université de Moncton participated in training Romanian social workers, Université de Montréal helped establish a training program for professional consultants in Poland and Université

de Québec à Trois Rivières joined a teacher education program in Hungary.

CONCLUSIONS

Compared with the vast range of activity between Canada and the nations occupying the former Soviet Union, relations with the nations of ECE have a long way to go. This region's state of affairs represents the legacy of decades of political, economic and cultural domination by the Soviet Union, and it bears reminding that it has been less than five years since that dominance was successfully challenged. As a separate entity, ECE merits further attention not because of its stunted development but because of its still unrealized potential.

Private investors are still weighing that potential, particularly in light of the slow pace of progress in places such as Russia or Ukraine. Even Hungarian-born Canadian financier Andrew Sarlos, who established a private pool of more than $80 million for Hungarian investment, has acknowledged the need for caution. The question is not one of whether economic progress will ever take place in ECE, but when. In 1990, York University administrative studies Dean Deszo Horvath encouraged impatient Canadian investors to act now to ensure a foothold in the region's future economic growth. "The only part of the world that's going to increase in trade is Eastern Europe and the Soviet Union," he said. "The crucial deals are being discussed now—and it's not Canadian firms that are discussing them."

From the point of view of the academic community, economic and political initiatives in ECE will overshadow most other activities until some stability is apparent. A country such as Hungary, which was one of the first to allow capitalist activities, may already be close enough to such stability to be considered for entry into the European Economic Union. Until such milestones are achieved, however, Canadian educational institutions will see most opportunities for interaction with ECE in the form of technical aid of one sort or another. If the last three years are any indication, infrastructure projects—be it the upgrading of a municipal sewer system, the installation of a new telephone system or the replacement of a political system—will continue to be the kind of activities that provide the most tangible results.

The need for such projects is immediate and obvious, but their impact in ECE has important long-term implications for Canada. Sarlos and fellow countryman Albert Reichmann, another successful Canadian businessman, have been two of the principal contributors to courses offered through the Canadian Consortium of Management Schools and the International Management Centre in Budapest. In fact, York University was a joint venture participant in the founding of the International Management Centre in Budapest and a similar center in Czechoslovakia in 1990. Participants in courses at the centers have been known to do quite well, often garnering further support for such efforts in their own countries; a few have risen to positions of prominence in business or government ministries, where their influence is still greater. This kind of investment, though far less tangible than any physical construction project, should be regarded as no less worthwhile.

By way of examining the future of their interaction with ECE, therefore, Canadian educators should consider this programmatic strategy:

- ***a review of such interactions***, asking which have been most successful and why. It seems clear that much of the current success has depended upon the talents of Canadian individuals who have been skilled or fortunate enough to establish good connections with other individuals in ECE. While any international exchange program must rely on good individual contacts, it should not necessarily be entirely dependent on this avenue. With the elimination of so many political obstacles in ECE, a more systematic approach is not only possible, but essential to ensuring any ongoing success.
- ***an analysis of the reasons for interactions***, asking why a particular Canadian ir stitution finds itself involved with ECE. The answer might be as simple as a single professor's interest in working in that region, but a university could find itself taking part of a much larger program committed to economic restructuring. As the general level of Canadian activity in ECE increases, it will become increasingly important for members of the academic community to remind themselves of their original goals and check their accomplishments against that standard.

- ***lobby for more than purely technical assistance***, so that Canadian efforts do not take on the one-dimensional nature of pure development work. Business, law and engineering will assume prominence because ECE countries themselves feel the need for growth in these areas. Yet universities, as more diverse cultural institutions, should also promote a broader understanding between people in both countries, making them and their institutions partners rather than mere objects of improvement. In this respect, academic life should serve as one of the best avenues for the exchange of sentiments so many Canadians feel for their roots.

The International Division of the AUCC, acting as a facilitator and representing its member institutions will continue to disseminate information, provide a forum for discussion and urge the Canadian government to consider the long-term positive effects of academic cooperation with this region so long hidden behind the Iron Curtain.

For more information contact: International Division, AUCC, 151 Slater St., Ottawa, K1P 5N1, Canada.

Table. Canadian University International Exchange Agreements in East Central Europe

I. BULGARIA

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
CARL-4	Carleton University	Ministry of Higher Education	Joint Research Student/Scholar Exchange	Unrestricted	80.12.01	on-going
EPM-7	Ecole Polytechnique de Montréal	Bulgarian State Committee for Science & Technological Progress	Faculty Exchange Joint Research Exchange of Scientific Information	Chemical Engineering	84.02.13	on-going
EPM-8	Ecole Polytechnique de Montreal	Bulgarian Academy of Sciences	Faculty Exchange Joint Research Exchange of Scientific Information	Chemical Engineering	81.01.01	on-going
GUEL-3	University of Guelph	Bulgarian Academy of Sciences	Student/Scholar Exchange Faculty Exchange Joint Workshops	Arts and Humanities Biological & Life Sciences Chemistry Geology Mathematics Engineering Physics & Applied Physics Social & Behavioural Sciences	89.09.01	60 months
MB-13	University of Manitoba	Bulgarian Academy of Sciences	Joint Research	Electrical Engineering	88.05.27	on-going
MTL-10	Université de Montréal	Sofia University	Joint Research Library & Documentation Exchange Joint Conferences and Seminars	Unrestricted	80.02.01	on-going
MTL-11	Université de Montréal	Bulgarian State Committee for Science & Technological Progress	Joint Research Faculty Exchange Student Exchange	Molecular Biology	86.01.01	72 months
UQTR-40	Université du Québec à Trois-Rivières	Bulgarian Academy of Sciences	Faculty Exchange Cultural, Scientific & Academic Collaboration	Engineering	92.01.01	36 months

From: Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa, Canada K1P 5N1 *Tel:* (613) 563-1236 *Fax:* (613) 563-9745 • February, 1993

Table. Canadian University International Exchange Agreements in East Central Europe

II. CROATIA

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
OTTA-35	University of Ottawa	Institut Rudjer Boskovic, Zagreb	Student/Scholar Exchange	Physics & Applied Physics	75.01.01	on-going
SHER-7	Universite de Sherbrooke	University of Zagreb	Faculty Exchange Joint Research	Physics & Applied Physics		on-going
WAT-26	University of Waterloo	University of Zagreb	Faculty Exchange Student/Scholar Exchange	German Slavic Languages Computer Science, General	90.12.01	60 months

III. CZECH REPUBLIC

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
GUEL-17	University of Guelph	Czech Technical University of Prague	Joint Research Faculty Exchange Exchange of Scientific Materials	Physics & Applied Physics Engineering & Technology	91.02.28	60 months
GUEL-18	University of Guelph	College of Chemical Technology, Prague	Faculty Exchange Joint Research Exchange of Scientific Materials	Chemistry Physics & Applied Physics Engineering & Technology	90.11.27	60 months
GUEL-7	University of Guelph	Prague Agricultural University	Faculty Exchange Joint Research Exchange of Scientific Materials	Agriculture Biological & Life Sciences Food Science & Technology Social & Behavioural Sciences	89.08.29	60 months
LAKE-9	Lakehead University	University of Agriculture, Brno	Faculty Exchange Student/Scholar Exchange	Forestry	89.01.01	on-going
MCGL-30	McGill University	Univerzita Karlova	Cultural, Academic & Scientific Collaboration	Medicine and Surgery	90.11.29	36 months
MTL-2	Universite de Montreal	Univerzita Karlova	Joint Research Faculty Exchange Student/Scholar Exchange	Medicine	90.11.05	on-going

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UQTR-6	Université du Québec à Trois-Rivières	Institute of Philosophy & Sociology	Joint Research Library & Documentation Exchange	Leisure Studies	85.01.01	on-going
UQTR-31	Université du Québec à Trois-Rivières	Institute of Chemical Technology, Pardubice	Faculty Exchange Joint Research	Pulp and Paper	91.03.29	36 months
UQTR-37	Université du Québec à Trois-Rivières	Institute of Theoretical & Applied Mechanics (Vysehradska)	Faculty Exchange Cultural, Scientific and Academic Collaboration	Pulp and Paper	91.01.01	36 months

IV. HUNGARY

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
CARL-2	Carleton University	Ministry of Culture & Public Education	Joint Research Faculty Exchange Student Exchange	Unrestricted	80.12.01	on-going
GUEL-2	University of Guelph	Hungarian Academy of Sciences	Student/Scholar Exchange Joint Seminars/Conferences	Agriculture Food Science & Technology Physics and Applied Physics Social & Behavioural Sciences Biological & Life Sciences	89.10.16	60 months
GUEL-11	University of Guelph	Gödöllö University of Agricultural Sciences	Faculty Exchange Joint Research Exchange of Scientific Materials	Agriculture Food Science & Technology Physics and Applied Physics Social & Behavioural Sciences Biological & Life Sciences	90.08.05	60 months
GUEL-14	University of Guelph	International Institute for Culture	Faculty Exchange Joint Research Exchange of Scientific Materials	Agriculture Food Science & Technology Physics and Applied Physics Social & Behavioural Sciences Biological & Life Sciences	90.01.12	60 months

Table. Canadian University International Exchange Agreements in East Central Europe

HUNGARY (continued)

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
RYER-2	Ryerson Polytechnical Institute	University of Miskolc	Faculty Exchange Joint Research Student/Scholar Exchange	Engineering & Technology	87.01.01	on-going
TORO-60	University of Toronto University of Waterloo	Budapesti Muszaki Egyetem	Faculty Exchange Joint Research Student/Scholar Exchange	Engineering & Technology	91.11.01	on-going
UBC-80	University of British Columbia	Budapest University of Economics	Student/Scholar Exchange	Business Studies	88.01.01	on-going
UQAC-3	Universite du Quebec a Chicoutimi Universite du Quebec a Montreal	International Institute for Culture	Faculty Exchange Student/Scholar Exchange	Political Science Sociology Biological & Life Sciences Neurology Engineering & Technology	88.12.01	36 months
UQAC-4	Universite du Quebec a Chicoutimi	Budapesti Muszaki Egyeptem	Faculty Exchange Joint Research Joint Conferences Library & Documentation Exchange Student/Scholar Exchange	Engineering & Technology Biotechnology	88.01.01	on-going

V. POLAND

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
CARL-3	Carleton University	Uniwersytet Warszawski	Student/Scholar Exchange Faculty Exchange Joint Research	Unrestricted	77.10.01	on-going

CONC-1	Concordia University	Academy of Fine Arts, Krakow Academy of Art, Poznan Academy of Music, Warsaw Academy of Music, Lodz Academy of Music, Katowice Academy of Music, Gdansk Academy of Music, Wroclaw	Faculty Exchange Joint Research Student/Scholar Exchange	Fine and Applied Arts	88.01.01	on-going
EPM-6	Ecole Polytechnique de Montréal	Politechnika Poznanska	Faculty Exchange Joint Research Exchange of Scientific Information	Electrical Engineering	82.08.31	on-going
GUEL-8	University of Guelph	Uniwersytet Jagiellonski	Faculty Exchange Exchange of Scientific Materials	Chemistry Biological & Life Sciences Social & Behavioural Sciences Earth and Geological Sciences Physics & Applied Physics	90.05.17	60 months
GUEL-10	University of Guelph	H. Kollataja Academy of Agriculture, Cracow	Faculty Exchange Joint Research Exchange of Scientific Materials	Animal Husbandry and Animal Production	89.12.19	60 months
GUEL-9	University of Guelph	Academy of Agriculture in Lublin	Faculty Exchange Joint Research Exchange of Scientific Materials	Biological & Life Sciences Agriculture Animal Husbandry & Production Crop Husbandry & Production Science and Technology	89.11.13	60 months
HEC-17	Ecole des Hautes Etudes Commerciales	Central School of Planning and Statistics, Warsaw	Faculty Exchange Joint Research Student/Scholar Exchange	Economics Management International Business Public Administration	90.04.04	on-going
LAVA-1	Universite Laval	Uniwersytet Lodzki	Faculty Exchange Joint Research Library & Documentation Exchange Student/Scholar Exchange Joint Conferences/Seminars	Labour & Industry Relations	88.01.26	on-going

Table. Canadian University International Exchange Agreements in East Central Europe

POLAND (continued)

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
LAVA-50	Universite Laval	Uniwersytet Warszawski	Faculty Exchange/Research Student/Scholar Exchange Library & Documentation Exchange Exchange of Pedagogical Material Exchange of Laboratory Equipment Joint Conferences/Seminars	Social & Behavioural Sciences Social Work	89.08.15	60 months
LAVA-73	Universite Laval	Politechnika Warszawska	Faculty Exchange/Research Student/Scholar Exchange Library & Documentation Exchange Joint Conferences/Seminars	Electrical Engineering Electronics Engineering Telecommunications Engineering Mechanical Engineering	92.10.07	60 months
LAVA-74	Universite Laval	Academy of Mines & Metallurgy of Cracow	Faculty Exchange/Research Student/Scholar Exchange Library & Documentation Exchange Joint Conferences/Seminars	Electrical Engineering Electronics Engineering Telecommunications Engineering Mechanical Engineering	92.05.24	60 months
MCMA-7	McMaster University	Uniwersytet Warszawski	Faculty Exchange Student/Scholar Exchange	Humanities Sciences	86.08.26	on-going
MTL-1	Université de Montreal	Uniwersytet Warszawski	Joint Research Joint Conferences/Seminars Library & Documentation Exchange	Sociology Modern Languages & Literature Law Biochemistry Geography Physics and Applied Physics Mathematics, General	87.01.08	on-going
SASK-3	University of Saskatchewan	Uniwersytet Marii Curie-Sklodowskiej	Joint Research Library & Documentation Exchange Student/Scholar Exchange	Education and Teacher Training	91.01.01	60 months

STXU-6	St. Francis Xavier University	Politechnika Poznanska	Faculty Exchange Joint Research Joint Conferences/Seminars Student/Scholar Exchange	Physics & Applied Physics	88.01.01	on-going
TORO-59	University of Toronto	Polish Academy of Sciences	Faculty Exchange Joint Research Joint Conferences Student/Scholar Exchange	Egyptology Nubiology Near Eastern Studies	92.01.01	36 months
UBC-71	University of British Columbia	Academy of Agriculture in Lublin Academy of Agriculture in Wroclaw Agricultural University of Warsaw H. Kollataja Academy of Agriculture, Cracow Academy of Agriculture in Poznan	Faculty Exchange	Agriculture	83.01.01	on-going
UQAM-4	Université du Québec à Montréal	University of Agriculture and Technology in Olsztyn	Faculty Exchange Joint Research Joint Seminars	Biological Sciences Biotechnology Food Sciences	91.09.16	36 months
UQAM-5	Université du Québec à Montréal	Uniwersytet Slaski	Faculty Exchange Joint Research	Geography (Scientific)	88.01.01	on-going
UQTR-1	Université du Québec à Trois-Rivières	Politechnika Warszawska	Faculty Exchange Joint Research	Electrical, Electronics & Telecommunications Engineering	90.11.13	60 months
UQTR-2	Université du Québec à Trois-Rivières	Uniwersytet Lodzki	Faculty Exchange Joint Research Student/Scholar Exchange	Philosophy	90.12.05	36 months
UQTR-4	Université du Québec à Trois-Rivières	Politechnika Poznanska	Joint Research Library & Documentation Exchange	Optics Biophysics & Molecular Biology	85.01.01	on-going

Table. Canadian University International Exchange Agreements in East Central Europe

POLAND (continued)

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
UQTR-17	Université du Québec à Trois-Rivières	Politechnika Biatostocka	Faculty Exchange Joint Research Student/Scholar Exchange	Electrical, Electronics & Telecommunications Engineering	91.03.16	60 months
WEST-11	University of Western Ontario	Uniwersytet Adam Mickiewic	Faculty Exchange Library & Documentation Exchange Student/Scholar Exchange	Fine & Applied Arts Social & Behavioural Sciences	89.06.01	on-going
WEST-12	University of Western Ontario	Uniwersytet Warszawski	Faculty Exchange Joint Research Exchange of Pedagogical Material Joint Conferences/Seminars Student/Scholar Exchange	Arts and Humanities Social & Behavioural Sciences Science, General	89.06.01	on-going
WEST-16	University of Western Ontario	Politechnika Warszawska	Student/Scholar Exchange Joint Research	Mechanical Engineering	91.01.01	on-going
WEST-23	University of Western Ontario	Politechnika Poznanska	Student/Scholar Exchange Joint Research	Chemical Engineering Biochemical Engineering	91.01.01	on-going
YORK-19	York University	Uniwersytet Warszawski Student/Scholar Exchange	Faculty Exchange	Biology	90.01.01	on-going

VI. ROMANIA

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
UQAM-3	Université du Québec à Montréal	University of Bucharest	Faculty Exchange Joint Research Student/Scholar Exchange	Communications	91.11.05	36 months
EPM-36	Ecole Polytechnique de Montreal	Technical Institute of Bucharest	Faculty Exchange Joint Research	Metallurgical Engineering	92.01.01	on-going

VII. SLOVAKIA

NUMBER	CANADIAN UNIVERSITY	PARTNER INSTITUTION	TYPE OF AGREEMENT	DISCIPLINES	START DATE	DURATION
LAKE-4	Lakehead University	College of Forestry and Wood Technology, Zvolen	Faculty Exchange Student/Scholar Exchange	Forestry	89.01.01	on-going
OTTA-3	University of Ottawa	Matica Slovenska in Matin	Library & Documentation Exchange	History	91.11.18	on-going
UQTR-29	Université du Québec à Trois-Rivières	Slovak Technical University, Bratislava	Faculty Exchange Joint Research	Pulp and Paper	91.01.28	36 months
UQTR-38	Université du Québec à Trois-Rivières	Bratislava Pulp and Paper Research Institute, Lamacska	Faculty Exchange Cultural, Scientific and Academic Collaboration	Pulp and Paper	91.01.01	36 months

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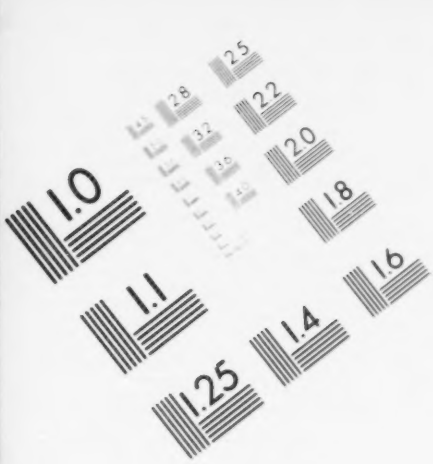

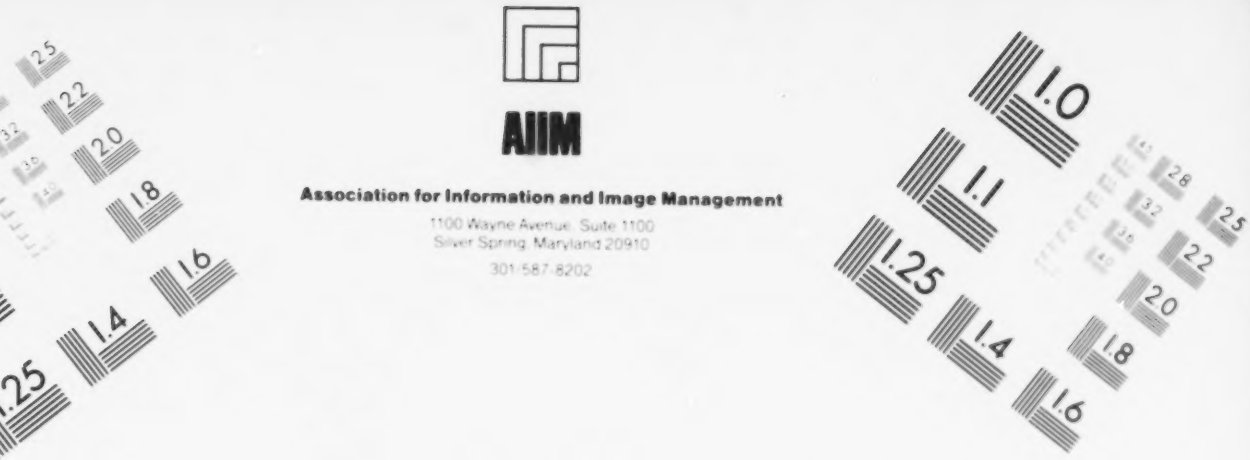

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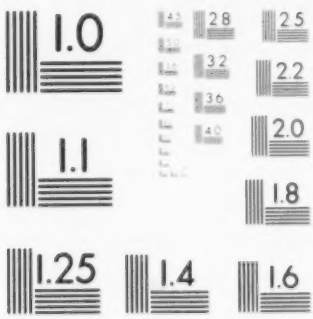

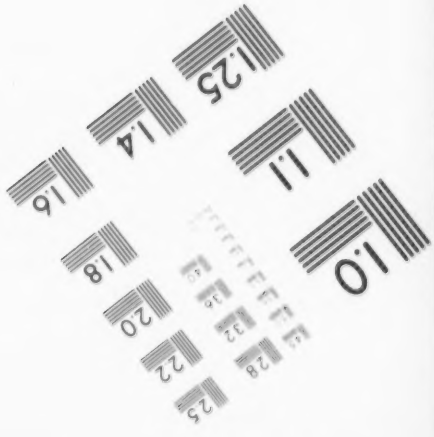

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European Union Initiatives to Support Cooperation in Science and Technology with the Countries of Central and Eastern Europe and the NIS

PREFACE
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Half a century after Europe was split down the middle, the collapse of the Soviet bloc and the end of the cold war has given the continent a chance to reunite and work towards a common future.

While raising great hopes, the upheavals of recent years have also presented Europe with enormous challenges.

Western Europe has been faced with what may be termed its "continental responsibility." To help the countries of the East consolidate democracies which are still fragile and develop efficient economies which will benefit everyone, solidarity between Eastern and Western Europe is absolutely essential.

For this reason, the European Union has launched a series of cooperation initiatives and set up economic and technical assistance programmes with Central and East European countries and the new independent states of the former Soviet Union.

Scientific and technical cooperation is an important part of this process. In a region having to cope with large-scale industrial modernization and facing serious environmental problems, science and technology have a major role to play in increasing prosperity and improving the quality of life.

As is often the case with cooperation measures, and always with scientific cooperation, the final outcome can only be positive. For researchers in the European Union, scientific cooperation programmes are an opportunity for close collaboration, after years of difficult contact, with some of the world's leading scientists.

The European Union initiatives will give researchers in Western Europe access to a whole body of scientific

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tradition and often original approaches, thereby laying the foundations for a united scientific community.

This paper outlines the scientific and technical cooperation initiatives launched with East European countries in recent years. From now on, these measures will be included under the new Framework Programme (1994-98) which covers every aspect of the European Union's RTD strategy. They will therefore be more structured and, like the other activities, carried out on a multiannual basis.

WHY COOPERATE WITH EASTERN EUROPE?

The upheavals which have taken place over the last few years in the countries of Central and Eastern Europe (PECO—Pays d'Europe Central et Oriental) and the new independent states of the former USSR have had a significant impact on the European Union. The collapse of the Soviet bloc has led not only to structural changes but also to changes in attitude, on both sides of the continent. The conflicts of the past 50 years have given place to an opportunity for reconciliation and the chance to work towards a common future.

In Western Europe, and in the Union in particular, where one used to speak about the East/West divide attention now focuses on East-West rapprochement. At a summit held in Paris from 14 to 16 July 1989, the seven most industrialized countries (G7) asked the European Commission to launch a series of initiatives to assist the countries of Central and Eastern Europe in their transition to democracy and a market economy.

In response to this request, the European Union has taken several initiatives covering a wide range of fields, including the economy, education and food production, to help these countries through this difficult transition period. The PHARE and TACIS technical assistance programmes are part of this process.

Action has also been taken in the field of research and technological development (RTD). However, where RTD is concerned, the European Union's objective is not to provide technical assistance but to strengthen *cooperation* between scientists and engineers in the East and in the Member States. As this paper explains, RTD cooperation with the East is beneficial in two ways: it helps other initiatives to be implemented (concerning the environment, for example, or energy) and has a series of positive spin-offs, sometimes indirect and long-term, which contribute to the development of science and technology in general and to East-West rapprochement.

In June 1992 the European Commission signed a cooperation agreement with Russia, the Ukraine and Belarus concerned with reducing the impact of the Chernobyl disaster on the environment and the human population. The same year, at the instigation of the European Parliament, a specific research and technological development initiative was launched for the countries of Central and Eastern Europe followed, in 1993, by several cooperation initiatives involving the New Independent States.

Prior to 1992 the Member States had of course established fruitful scientfic and technological links with the countries of Central and Eastern Europe and the former Soviet Union. It is well known that even at the height of the cold war, many scientists maintained excellent professional and personal relations across the iron curtain. Very high quality research was being carried out in the East in a number of fields, including mathematics, space research, theoretical physics, taxonomy and descriptive biology. And precisely because they were isolated, researchers in these countries developed original and productive approaches in certain areas.

However, scientific and technological research in the East has been handicapped for a long time by a number of difficulties, in particular structural weaknesses. Although the situation may vary from one country and one field of research to another, general problems are: lack of equipment, the antiquated *modus operandi* of some research institutes, the strong emphasis on military research and lack of information (limited access to international journals, insufficiently developed telecommunications networks, etc.)

This is compounded by problems connected with the current reorganization of scientific research in these countries and general disquiet in a scientific community weakened by drastic cuts in research budgets and huge staff reductions.

However, while Western Europe can provide the East with a good deal of support, scientists in the West also have much to learn from cooperation with the East: contact with top level researchers, access to other schools of thought, application of know-how to certain specific problems (the environment, nuclear safety, etc.).

In these circumstances, the funds allocated by the European Union for scientific and technological cooperation with Eastern Europe may seem limited. However, it must be remembered that the Union's objective is to concentrate on action which is more effective taken at Union level, rather than by individual Member States. In this context, it must help launch programmes which complement bilateral initiatives taken by the Member States as effectively as possible.

Moreover, it must be remembered that European Union initiatives in the field of RTD are only one part of a general framework for cooperation which covers a large number of areas.

This paper outlines the RTD initiatives taken by the European Union since the early 1990s. Various types of action have been taken, with different objectives. This is because the general background and the situation as regards research differ from one country to another: the needs and potential of Russia, for example, are different from those of Poland, which differ in turn from those of Azerbaijan.

However, broadly speaking, cooperation has progressed in four major stages. Further details are given on the following pages.

East–West RTD Cooperation

- 1992: a scientific and technological cooperation programme associating the European Union, Russia, the Ukraine and Belarus was launched to support international research on the consequences of the Chernobyl disaster for the environment and the human population
- 1992: at the instigation of the European Parliament, the first PECO-COPERNICUS programme supported RTD measures involving the countries of Central and Eastern Europe (mobility, networks, conferences, joint projects, participation in five specific programmes of the third Framework Programme)
- 1993: the European Union set up the INTAS association, which is supporting the first research projects open to all the new independent states of the former Soviet Union
- 1994: the International Science and Technology Centre was opened in Moscow. Financed by the European Union, Japan and the United States, the centre will help Russia reorient researchers in the military sector towards civilian applications

What has been achieved so far? Clearly, it is too early to make a detailed evaluation of the impact of the many activities currently under way.

However, there is no doubt that measures such as mobility grants, support for conferences and the setting-up of scientific networks have enabled researchers in the East to maintain contact with their colleagues in the European Union. When one considers that in most East European countries many top researchers have left science for another profession in recent years and that in 1992 a Russian researcher, for example, earned on average ECU 8 per month, one can see why these initiatives give scientists in the East a much-needed boost and have a significant impact on a personal level.

By taking these initiatives, the European Union is helping to stop the brain drain. By giving the countries of the East the opportunity to cooperate with scientists and technologists in the West, the Union is contributing to both the transformation and the development of RTD infrastructure in Eastern Europe.

The measures should also help to preserve some of the scientific and technological traditions developed in the East, to clean up the environment (which is a major concern) and to put RTD at the service of the major reforms now under way.

An outside observer would probably be surprised by the speed and extent of these developments, despite the practical difficulties encountered. The cooperation programmes launched by the European Union, originally limited to Poland and Hungary, and to the development of RTD infrastructure, now cover a wide range of scientific and technological fields and involve nearly 30 countries. And more scientific and technological cooperation initiatives will be needed in the years to come, despite a relatively restricted budget. As part of a rationalization process, they have been regrouped, with other international cooperation initiatives, within one of the chapters of the fourth Framework Programme, which sets out the European Union's RTD activities for the period 1994-98.

In the past, science was an important link between people and nations. It continues to play this role today. With the development of East-West cooperation in the field of science and technology, Europe is

perhaps paving the way for a "new renaissance" at the dawn of the 21st century . . . .

A BRIEF HISTORY OF COOPERATION WITH EASTERN EUROPE IN THE FIELD OF SCIENCE AND TECHNOLOGY

Since the late 1950s, the European Union has been providing support for scientific research and technological development. Originally limited to the nuclear energy sector, the activities it supports now cover most fields of science and technology.

Action taken by the European Union in the field of RTD consists not only in tackling problems that the Council and Parliament choose to work on at Union level, for reasons of cost or complexity, but also in supporting and complementing initiatives taken by the Member States.

Cooperation enables a "critical mass" to be achieved in various fields of high technology and provides a framework for activities which complement action taken at the national level.

Since 1984, all European RTD activities have been strategically planned within the Framework Programmes, which cover a five-year period. The Framework Programmes are designed to boost the competitiveness of European industry by encouraging RTD. The content and priorities of these programmes thus reflect not only the main scientific and technological developments of the period, but also the Union's strategic interests.

Cooperation With Countries Outside the European Union

The fourth Framework Programme, which covers the period 1994-98, has 20 chapters, each relating to a particular area, from information technology to the training and mobility of researchers and including the environment, industrial technology, controlled thermonuclear fusion, etc. One of the chapters specifically concerns cooperation with countries outside the Union and with international organizations.

International cooperation in the field of RTD is guided by the principle of "mutual interest." The main aim is to benefit all the parties involved, although the benefit may sometimes be very long-term. For example, in specialized sectors where costs are high, cooperation enables the required "critical mass" to be achieved so that general problems can be tackled. In some cases, (for example, cooperation with developing countries) it provides European researchers with extra training opportunities. We will see in the following sections that cooperation with the countries of Central and Eastern Europe is motivated by one or other of these factors, and sometimes both.

The Need for Scientific and Technological Cooperation With the East

The countries of Central and Eastern Europe and the new independent states of the former Soviet Union have considerable scientific and technological potential.

At the beginning of 1990 official statistics showed that the Soviet Union had almost three times as many scientists and engineers as the European Union. It is interesting to note that two-thirds of these researchers were in Russia and that most of them were working on military projects.

The countries of the East have developed centres of excellence in a number of scientific and technological disciplines. Hungary, for example, has an international reputation for mathematics, chemical engineering and transport; Poland for applied physics, optics and mining engineering; Russia for space research, theoretical physics, metallurgy, electrical engineering, etc.

However, as we have already pointed out, research in Central and Eastern Europe suffers from a number of handicaps, which vary in degree from one country and one field to another.

In these circumstances, recent upheavals have created additional problems, such as the colossal task of converting military research to civil applications, and, particularly in Russia, the restructuring of scientific establishments and the reduction of financial resources allocated for RTD (between 1989 and 1993 the Russian authorities reduced their research budget by two-thirds).

There are also other major problems, for example protection of the environment: little effort seems to have been made to promote energy efficiency in industry or the transport sector and, according to an International Atomic Energy Agency report published in 1992, the risk of accident in some nuclear power stations is a thousand times higher than in the West.

Cooperation between the European Union and the countries of Central and Eastern Europe and the New Independent States is guided by the principle of "mutual interest": it provides researchers in the East with an opportunity to extend their scientific and technical knowledge and use it to tackle urgent social and economic problems; at the same time it gives researchers in the European Union the chance to learn useful lessons in many fields (medicine, energy, engineering and basic science, etc.) and establish links with some of the world's top researchers in the East.

PHARE: The European Union's First Initiative in 1990

At the "Arch Summit" held in Paris from 14-16 July 1989, the heads of state and government of the G7[1] countries expressed their willingness to help the countries of the East transform their economies, improve their environment and establish truly democratic forms of government.

"To this end," the heads of state and government declared at the end of the summit, "we call on the European Commission to take the necessary measures, in agreement with the other Member States of the Union, and to associate all countries concerned, in addition to those participating in the Summit."

In response to the G7 initiative, the 24 countries comprising G24[2] decided, at the Houston Summit of 9 and 10 July 1990, to launch a concerted action to provide economic aid for the countries of Central and Eastern Europe. G24 gave the European Commission a mandate to coordinate the programme— for obvious historical and geographical reasons.

In 1990 the PHARE programme was launched (Poland and Hungary, Assistance for the Reconstruction of the Economy). Originally designed to assist Poland and Hungary, as its name indicates, PHARE now involves 11 Central and East European countries.[3]

Focusing on transition to a market economy, PHARE covers initiatives in a number of fields: reconstruction of the economy, environment, education, training, energy, etc. reflecting the priorities of the countries involved. The PHARE budget has increased from ECU 440 million in 1990 to over ECU 990 million in 1994.

Strictly speaking, scientific and technological cooperation is not one of PHARE's main objectives, although it is a means of attaining some of them. At the request of several Central and East European countries, part of the PHARE budget has been used to support research projects: for example, Hungary has proposed setting up a specific programme to support science (ACCORD).

Scientists in these countries are also involved in education and training programmes supported by PHARE, namely TEMPUS (Trans-European Mobility Programme for University Students) and ACE (Action for Cooperation in the field of Economics), launched in 1990 and 1991 respectively. TEMPUS supports mobility initiatives and joint training projects, especially for scientists and engineers. ACE supports initiatives specifically intended for economists.

Although some of the PHARE resources have been used to support research and technological development (4% of the total budget in 1992) it was clear that PHARE would have to be supplemented by a programme specifically concerned with science and technology. This could help establish links between researchers in Eastern and Western Europe, strengthen the role of RTD in industrial development in the East, improve the quality of life, help to stop the brain drain threatening these countries and contribute to the transformation of the economy.

SCIENTIFIC AND TECHNOLOGICAL COOPERATION WITH CENTRAL AND EASTERN EUROPE

On 10 July 1990, the European Parliament adopted a resolution concerning scientific and technological cooperation with the countries of Central and Eastern Europe. In 1991, Parliament decided to set aside ECU 55 million of the Union budget for scientific and technological cooperation with these countries.[4] As a result of Parliament's initiatives, several RTD projects have been launched by the Union to assist Central and East European countries.

The range of problems besetting these countries meant that scientific and technological cooperation had to be approached from several angles at once. Under the budget heading allocated by Parliament, five types of action, grouped together under PECO-COPERNICUS, were launched to respond to priority needs for the period 1992-93:

Mobility

Two initiatives were launched: GO WEST, which enabled 2,307 researchers from Central and Eastern

Europe to work in the European Union's leading research laboratories, and GO EAST, which funded 217 moves in the opposite direction. The "multiplying effect" of these grants was guaranteed by the researcher's obligation to return to his/her home country at the end of the training period.

Networks and Conferences

This initiative was designed to promote cooperation and the exchange of information between scientists in Eastern and Western Europe. Fifty-four networks were set up and 179 conferences and seminars organized.

Joint Projects

The aim of this initiative was to support research projects carried out jointly by Central and East European organizations and organizations in the European Union. In 1992-93, 227 projects were selected.

Participation in the Third Framework Programme

The European Union decided to encourage Central and East European countries to participate in five of the fifteen specific programmes of the third Framework Programme which would help them respond to urgent needs.[5] A special budget was allocated to cover the cost, as these countries would otherwise have been unable to participate for lack of hard currency. The 131 projects selected enabled scientists from the East to participate fully in Union research projects in priority areas.

Participation in COST

This initiative allowed Central and East European countries to participate in COST (*European Cooperation in the field of Scientific and Technical Research*) On 21 November 1991, Poland, Hungary and Czechoslovakia joined COST, which is now the longest-running scientific and technical cooperation programme in Europe.[6]

A special budget enabled the countries of Central and Eastern Europe, including those which were not members of COST, to participate in COST projects. With a very flexible approach (participation is optional and the projects are "customized" to correspond to the interests of the country concerned) COST cooperation has enabled these countries to participate in projects focusing on their specific needs.

The five PECO-COPERNICUS initiatives were very successful: nearly 12,000 proposals were submitted by the deadline, 7 August 1992. There were a particularly high number of applications for mobility grants and joint projects. Over 20% of the joint projects concerned the environment (waste treatment, reduction of the impact of industrial activities on the environment, etc.). The problem was that this success created expectations among scientists in Central and Eastern Europe that the resources available could not satisfy. Practical difficulties also arose when the applications were processed. To make things easier, the Commission adopted a flexible approach so as to increase the number of grants awarded and projects selected—providing an important boost to morale.

The proposals submitted under PECO-COPERNICUS were assessed by teams of experts from both East and West. A total of 3,265 proposals were selected. The selection criteria were those adopted for the RTD Framework Programmes: the distribution of funds is essentially determined by the scientific and technological merit of the projects and their worth in terms of added value. (This is not the case with PHARE and the Structural Funds, which operate on the basis of national quotas).

To satisfy the demand and respond to the most urgent needs, the Commission, aware that the majority of the projects proposed were of a very high standard, decided to proceed as follows:

- in 1992 the Commission used the whole of the ECU 55 million budget to finance the first set of projects: mobility grants (ECU 20 million), networks and conferences (ECU 10 million), joint projects (ECU 10 million), COST initiatives (ECU 5 million) and participation in the Framework Programme (ECU 10 million). Several organizations established in the Union collaborated to implement the mobility initiatives, which attracted a large number of applications.
- in 1993, the Commission decided not to issue a new call for proposals but to use the resources available (ECU 38 million) to fund more of the applications of very high standard submitted in 1992. The 227 projects selected cover a wide variety of fields, from the social sciences (reorganization of industrial relations, etc.) to information technologies (software research) and including nuclear safety (a major concern in the

East), agri-foodstuffs (food preservation, etc.) and basic science (theoretical physics, biochemistry, etc.).

Examples of European Union-PECO Cooperation in 1992:

- A network of Czech, German, Spanish, Italian and Dutch laboratories began studying air pollution caused by industrial activity and transport in Central and Eastern Europe. The consortium is analysing the current situation in order to develop appropriate technical solutions.
- Europe is short of engineers who specialize in electronic circuit design. EUROCHIP, a consortium of 300 organizations established in Western Europe and supported by the European Union, was set up to remedy the situation. The consortium has recently expanded into Central and Eastern Europe in order to draw on the expertise of scientists in these countries.
- Hungarian, Czech and German scientists are carrying out an epidemiological study of coal and uranium miners in the East, focusing on cancer prevention in particular.
- In order to encourage eminent scientists who emigrated from Central and Eastern Europe to return to their countries of origin, three **European chairs** were established with European Union support (molecular biology at the Charles University in Prague, atomic physics at the Eötvos University in Budapest and social sciences at the University of Warsaw. Since then, other chairs have also been financed.

In 1993, a new call for proposals was issued for participation in the third Framework Programme, in response to which 653 proposals were submitted. The highest number of proposals concerned scientific networks (172 networks proposed), the environment (141 proposals) and biomedical research (139 proposals). A total of 261 projects were selected. The European Union also provided support for studies and conferences.

Examples of European Union-PECO Cooperation in 1993:

- Germany, Italy, Ireland and Romania began collaborating on a project to develop a system for producing electricity using solar and wind energy, designed in particular for insulated buildings.
- The United Kingdom, Germany, Sweden, Estonia, Latvia, Lithuania and Poland began collaborating on a project to study the ecology of the Baltic sea, in particular to assess the impact of socio-economic activity on the ecosystems of the region with a view to protecting the marine environment.
- Another project, involving France, Hungary, Lithuania and Slovenia is looking at the incidence of cancer among workers in the nuclear industry in the three East European countries. The aim is to assess the effects of prolonged exposure to low doses of radiation.

Cooperation with the New Independent States

During the same period, the European Union began cooperation with the new independent states of the former Soviet Union.[7]

The Chernobyl disaster, which had a major impact in both East and West was a powerful incentive for East-West cooperation.

In early 1988, ten "post-Chernobyl" research initiatives were launched, involving around fifty teams of European scientists. In 1990, the CHECIR (CHErnobyl Centre for International Research) was set up at Chernobyl, on the initiative of the International Atomic Energy Agency, so that international research on protection against ionizing radiation could be carried out with a view to mitigating the effects of the accident on the environment and the human population and rehabilitating contaminated areas. However, subsequent political changes in the former Soviet Union prevented the programme from going ahead as planned. For this reason the Commission signed, on 23 June 1992, a scientific and technological cooperation programme with Ukraine, Belarus and Russia (see below).

Cooperation to Mitigate the Effects of the Chernobyl Disaster

- To date, sixteen projects supported by the European Union have been launched involving some 80 laboratories in the Member States and around 120 establishments in Russia, the Ukraine and Belarus to study and mitigate the effects of the Chernobyl disaster. The projects assess the impact of radioactivity on the environment, its control, crisis management and effects on health. The results of one project show that some people contaminated by the accident

are suffering more from psychological problems than from the physical effects of radioactivity. Researchers have observed a general tendency to depression, nervous tension, etc., which can lead to many health problems and have an adverse effect on a person's life in general.

- Another project has detected 386 cases of thyroid cancer in children in Belarus and Northern Ukraine. A group of international experts has established that the incidence of thyroid cancer in children aged 0-14 has increased at least 20 times in Belarus since the Chernobyl disaster occurred and that the accident is the most likely cause of this increase. Two research projects have trained medical teams from Belarus and the Ukraine in the treatment of this type of cancer. Funds have been allocated by ECHO (European Union Humanitarian Office) for purchasing the medicines and equipment required.

In 1991, the TACIS programme was launched (Technical Assistance for the Commonwealth of Independent States) which is the equivalent of PHARE for the new independent states of the former Soviet Union. The aim is to speed up the process of economic reform and transition to democracy currently under way in the NIS. To date, TACIS has supported activities in the following fields: energy, human resource development, nuclear safety, food production and distribution, transport, telecommunications and company services. The TACIS budget for 1994 is ECU 460 million.

However, it was clear that scientific and technical cooperation initiatives were also needed, even though the situation was very different from that in the countries of Central and Eastern Europe.

In response to an initiative taken first by scientists, then by the political decision-makers, the European Commission decided, in July 1992, to create a framework for scientific and technological cooperation with the New Independent States: the INTAS association (INTernational ASsociation for the promotion of cooperation with scientists in the new independent states of the former Soviet Union) based in Brussels (see below).

This was an independent framework which would enable the European Union to respond, with speed and flexibility, to the needs of the New Independent States. To enable large-scale initiatives to be taken, the INTAS budget is financed from several sources.

INTAS and the Newly Independent States

INTAS currently has 16 members: the European Union as such, the 12 Member States, Austria, Finland and Switzerland. (Norway and Sweden applied for membership at the beginning of 1994). The aim is to launch cooperation initiatives in the field of non-military research with scientists in the New Independent States. In 1993 and 1994 the main emphasis has been on joint research projects, involving laboratories in the INTAS member states and in the NIS. A large percentage of the INTAS budget is currently funded by the European Commission.

In order to translate the willingness to cooperate into concrete action, politicians and scientific experts discussed and examined the situation in order to define subject areas and priorities. The visit of a delegation from the European Parliament and the Commission to Russia in 1993 was particularly important in this respect.

When INTAS was set up, on 29 June 1993, an initial batch of 54 projects were approved for total funding of ECU 4 million. A new call for proposals, which closed on 15 October 1993, attracted 3,395 proposals costing ECU 912 million, more than 40 times the amount available. At the end of 1993, INTAS selected 509 projects for which it allocated a total budget of ECU 21 million. Each project associates at least 2 laboratories in member countries with a laboratory in one of the New Independent States. In total, some 1,214 research centres in the former Soviet Union and 1,754 centres in the INTAS member countries will be involved in close collaboration on these projects.

At the same time, an initiative was launched with European Union support to tackle a specific problem of great concern, which involves mainly Russia, but also some of the other New Independent States. Disarmament and the slowing down, or closure, of some military research programmes have raised very important questions: how could the highly skilled labour force be used for peaceful activities, meeting civilian needs? How could one prevent the changes taking place from leading to a dispersal and proliferation of the expertise and technologies used for arms manufacture which could pose a threat to world peace?

The European Union has taken this problem very seriously. On 27 November 1992 an agreement was signed in Moscow between the European Union, the United

States, Japan and Russia establishing an "International Science and Technology Centre" (ISTC) in order to tackle these issues. The Centre, located in Moscow, opened on 17 March 1994. The Union has invested ECU 20 million, taken from the TACIS budget, which is roughly a third of the Centre's total budget for the first two years, the rest coming from the United States (ECU 22 million) and Japan (ECU 15 million). Russia is providing infrastructure and administrative support.

The ISTC will provide financial support for RTD projects carried out by Russian scientists and institutions formerly working for the army. The funds will be used mainly to pay researchers' salaries so that they can continue working in Russia. Organizations established in INTAS member countries can participate in projects supported by the ISTC but will receive no funding from the Centre. However, they will have some privileges, such as being able to export equipment to Russia tax-free and share the intellectual property rights deriving from ISTC-funded projects.

At a meeting on 17-18 March 1994 the ISTC's Governing Board approved an initial batch of 23 projects, some 180 of which were submitted by Russian establishments. The projects cover a wide range of fields, including nuclear safety, environmental protection, the chemicals industry and laser technology. They will enable the equivalent of over 1 000 full-time scientists previously employed in the military sector to work on civilian applications.

Initiatives Under Way and Future Activities

Initiatives planned for 1994 include:

- COPERNICUS 1994, supporting joint research projects and concerted action in six fields: information technology, communication and language technologies, manufacturing, production and processing of materials, the agri-foodstuffs sector and biotechnology. Although COPERNICUS is principally intended for the countries of Central and Eastern Europe, COPERNICUS 1994 is also open to the New Independent States. However, to avoid any overlap with INTAS activities the basic consortium must comprise laboratories in Central and Eastern Europe (at least two, in two different countries) and the European Union (at least one for joint projects and two for concerted actions). A budget of ECU 57 million has been earmarked for these activities;
- a PECO 1994 initiative, which finances PECO and, for the first time, NIS participation in five specific programmes of the third Framework Programme. Amount allocated: ECU 29.5 million;
- a call for proposals issued by INTAS, which closed on 8 April 1994 and has a budget of ECU 20 million. Some 4,800 proposals were submitted. The call for proposals covered a wide range of disciplines, including physics, astronomy, astrophysics, mathematics, telecommunications and information technology, chemistry, life sciences, the environment, energy, aeronautics, space research and the human, economic and social sciences.

Everything seems to indicate that cooperation with the East in the field of science and technology will continue to develop and that the distinction between programmes involving the countries of Central and Eastern Europe on the one hand and the NIS on the other will gradually disappear. Scientific and technical cooperation has an important role to play in furthering rapprochement between the European Union and the countries of the East. By allowing the PECO and the NIS to participate in the RTD Framework Programmes, the European Union is helping scientists on both sides of the continent to become part of a single European scientific community. Links with the East are strengthened and the approach can vary depending on the situation in the country concerned and its relationship with the European Union.

The Fourth Framework Programme

On 26 April 1994, the Council and the European Parliament adopted the fourth Framework Programme, with a total budget of ECU 12.3 billion for five years (1994-98).

A new element in the fourth Framework Programme is a specific programme which covers all cooperation initiatives with countries outside the European Union and with international organizations.

This specific programme has a budget of ECU 540 million for five years. Cooperation with the countries of Central and Eastern Europe and the New Independent States is a priority objective: almost half the programme's budget, i.e. over ECU 200 million, will be allocated for this activity. The programme should cover initiatives which complement those taken by EU Member States and help with the coordination of these initiatives.

The programme's budget is relatively small considering the potential for cooperation with these countries and the problems involved.

Through appropriate RTD activities the programme aims to support the countries of Eastern Europe in their transition to a market economy and help integrate them into the EU environment, for example through prenormative activities in areas such as information technology and telecommunications, advanced materials, energy, dissemination and exploitation, etc.

The programme comprises three types of action:

- specific initiatives, to respond to urgent needs in areas such as energy resources, information, environmental protection and human health;
- INTAS, once members have signed a new agreement;
- participation in the specific programmes of the fourth Framework Programme.

WHAT HAS COOPERATION ACHIEVED?

To date, cooperation between the European Union and the countries of Central and Eastern Europe in the field of RTD has amounted to a budget of over ECU 200 million, over 2,300 grants and more than 600 scientific cooperation projects. As for the NIS, the radiation protection programme and INTAS have so far selected over 500 projects with a total budget of over ECU 70 million.

But, leaving the figures aside, how successful have these initiatives been so far?

Examination of some of the reports submitted by researchers who received GO WEST mobility grants shows that they found the experience extremely useful. We may thus assume that the links, both personal and professional, established as a result of these "stages"— the quality of which is undisputed— may be a basis for more long-term scientific and technological cooperation.

However, the view of what cooperation has achieved so far differs from East to West.

From a Western point of view, the support given by the European Union has led to fruitful cooperation, involving scientists who are sometimes eminent international specialists in their field. The projects are an opportunity for researchers to extend their knowledge and know-how in a wide range of fields, including environmental protection, nuclear safety, medicine, management sciences and applied economics.

For scientists in the East, this is also important. However, in addition to science and technology there is also much to be gained on a human level. At present, the opportunity to travel, to attend a conference, to establish links with the West, to be able to subscribe to international journals and to participate in the assessment of projects may represent a major achievement for a scientist in the East. These initiatives can thus be a significant boost to morale. They give researchers access to the latest scientific equipment and the opportunity to take their place in the international scientific community, thus helping to keep the research potential in the East alive. They also help academies, universities and laboratories keep pace with developments so that the countries concerned can derive maximum benefit from the action taken and develop a sound basis for their own research.

Any assessment of research activity must consider the qualitative and indirect impact of the projects and their long-term effects: it will take several years to reap maximum benefit from the links established between several thousand laboratories in Western, Central and Eastern Europe as a result of cooperation, and some research projects will not produce concrete results for several decades.

In the medium and long term, scientific and technological cooperation between the European Union and the countries of Central and Eastern Europe and the NIS will contribute to:

Safeguarding Science and Technology

Although the resources available are relatively limited, the cooperation initiatives launched by the European Union are designed to prevent some of the scientific and technological traditions developed in the East from being destroyed by the upheavals taking place at all levels of society. They enable a certain number of highly qualifed researchers to stay in the East and help to preserve the knowledge built up over the years—which benefits not only the countries themselves but scientists all over the world. Thus, cooperation not only helps to make science more productive; it also helps to stop the brain drain by discouraging top researchers from leaving to work in universities or companies abroad or changing to other professions (internal brain drain) all of which jeopardizes future development.

Improving the Quality of Life

The degradation of the environment is a major cause of concern in Central and Eastern Europe and the NIS. Researchers in Western Europe can help the East in many ways: energy use, combating pollution, nuclear safety, etc. This will improve living conditions not only for East Europeans but also for the West, since Europe is a single continent. Several thousand scientists in the NIS are highly specialized in technologies used for weapons manufacture. Cooperation with these countries must also aim to prevent these scientists exporting their knowledge all over the world, which could be a threat to world peace.

Using Research to Respond to Immediate Social and Economic Needs

The countries of Central and Eastern Europe and the NIS have problems and urgent needs of their own. By supporting research in specific areas such as the environment and medical research, the Union is helping them to tackle urgent social problems. In the longer term, RTD should also promote economic development and transformation of industry in these countries.

A PRAGMATIC AND LONG-TERM APPROACH

The initiatives taken during the last few years to promote cooperation between the European Union and Eastern Europe have been designed not only to help the countries in the East solve their problems but to give scientists in Western Europe the chance to take advantage of new opportunities. The benefits for scientists, and indeed for everyone in the countries concerned are obvious, which is why cooperation had already begun before the iron curtain came down.

The political changes which have taken place have increased the scope for cooperation, but they have also highlighted the need for action at Union level, for two main reasons:

- to ensure the development, as a result of coordinated action at Union level, of a coherent and concerted approach;
- to give scientists and research institutes which, in certain fields, are among the best in the world, the opportunity to participate in Union research programmes.

However, getting these initiatives off the ground has not been easy and the Union has been confronted with a number of problems, most of which were new in an RTD context.

The European Union has launched scientific and technological cooperation initiatives with the East against a diverse and unstable background littered with doubts and unknowns. The Union has opted for a cautious strategy, preferring specific initiatives of limited scope to new programmes of a general nature. The European Union's approach is both pragmatic and long-term, comprising:

- initiatives designed to respond to specific problems in these countries, which are due in part to inadequate infrastructure and lack of financial resources. The distinction can be made between the countries of Central and Eastern Europe, on the one hand, and the NIS on the other;
- a strategy which reflects the European Union's willingness to work with the countries of the East as equal partners, collaborating with scientists and research institutes which are among the best in the world.

The EU is thus pursuing a strategy which focuses on problems specific to Eastern Europe and the interests of both sides, immediate priorities and long-term objectives, which will benefit all concerned. The table below sets out some of the difficulties involved and the European Union's response.

The scene is thus set for closer collaboration between scientists from East and West, which is perhaps one step closer to establishing a united scientific community in Europe.

The European Union's Response to Problems of East-West Cooperation

The European Union's strategy for scientific and technological cooperation with the countries of Central and Eastern Europe and the NIS has to take account of a number of problems and constraints:

Problem:

Limited financial resources

Moral responsibility

Technical constraints

Strategic problems

Nature of the Problem:

In the period 1991-94, the European Union spent over ECU 270 million on scientific and technological cooperation with Eastern Europe. There is a sizeable gap between the amount of money available and the resources required to tackle all the problems in the East.

There is a risk that the action taken by the European Union may generate excessive demand from researchers in the East, creating expectations which the EU will not be able to satisfy.

It is not easy to set up cooperation projects with the East. RTD cooperation between Member States of the European Union brings together countries with similar standards of living, where communication between partners is relatively easy and where monitoring and financial control procedures can be established. None of this applies to the East.

While the European Union has a clear picture of the RTD situation in the Member States, in particular the means available for strengthening weak points, this is far from being the case where the East is concerned. Much work has been done, and still needs to be done, to evaluate the right "return on investment" for both the East and the European Union.

The European Commission's Response

The initiatives taken by the European Union are developed in synergy with the Member States and the countries concerned; they focus on very precise objectives (participation in the Framework Programme, conversion of military research, nuclear safety, etc.) and act as catalysts, having a significant multiplying effect (e.g. conferences, training-mobility grants, etc.).

Given Eastern Europe's major research potential and the extent of its current problems, the action taken by the European Union cannot satisfy all expectations. In these circumstances, the Commission's contribution is mainly to initiate and act as a catalyst. The amount spent on RTD by the European Union is only 4% of public expenditure on research in the Member States.

These problems encourage the Union to explore new methods for managing projects. Specific structures have been set up in the countries concerned (ISTC, INTAS and CHECIR) to facilitate this. The Commission has also adopted a flexible approach to project proposals.

In order to incorporate and satisfy the needs of both sides, assessment of the proposals submitted under the cooperation programmes is carried out by mixed groups of experts from East and West. In addition, studies, visits and working meetings are regularly organized in order to take account of studies carried out by experts and the political authorities in the European Union and in the East.

LIST OF PROGRAMMES, OTHER INITIATIVES AND CONTACTS

The table below lists the various programmes and other initiatives referred to in this paper and the addresses and fax numbers of the persons to contact for each programme.

ACE
Action for Cooperation in the Field of Economics
Mr. Gerassimos Thomas
ACE 94, European Commission, DG II—Economic and Financial Affairs
200 rue de la Loi, B-1049, Brussels
Fax: 32-2-299 35 02

CHECIR
Chernobyl Centre for International Research; International Cooperation Agreement on the Consequences of the Chernobyl Disaster
Mr. Jaak Sinnaeve
Mr. Lucien Cecille
European Commission, DG XII—Science, Research and Development
200 rue de la Loi, B-1049, Brussels
Fax: 32-2-296 62 56

ISTC
International Science and Technology Centre
Mr. Leonidas Karapiperis
European Commission, DG XII—Science, Research and Development,
200 rue de la Loi, B-1049, Brussels
Fax: 32-2-296 33 08
Mr. Christoph Wiesner
European Commission, DG I—External Relations
200 rue de la Loi, B-1049, Brussels
Fax: 32-2-296 33 79

INTAS
International Association for the Promotion of Cooperation with Scientists from the New Independent States of the Former Soviet Union
Mr. Gerard Den Ouden
INTAS, 14A rue du Luxembourg, B-1040, Brussels
Fax: 32-2-549 01 55

PECO-COPERNICUS
Scientific and Technological Cooperation with the Countries of Central and Eastern Europe
Mr. Luigi Massimo
European Commission, DG XII—Science, Research and Development
200 rue de la Loi, B-1049 Brussels. Fax: 32-2-296 33 08

PHARE
Poland-Hungary, Assistance for the Reconstruction of the Economy (now open to 11 Central and East European countries)
Mr. Peter Kalbe
Mr. Tom Glaser
Mr. Joaquin Lopez de Ayala
European Commission, DG I—External Relations
200 rue de la Loi, B-1049 Brussels
Fax: 32-2-299 17 77

TACIS
Technical Assistance for the Commonwealth of Independent States
Mr. Peter Kalbe
Mrs. Gerlinde Niehus
Mr. Johan Slotboom
European Commission, DG I—External Relations,
200 rue de la Loi, B-1049 Brussels
Fax: 32-2-231 04 41

TEMPUS
Trans-European Mobility Programme for University Students
Mrs Gisela Schürings
TEMPUS, 19H avenue des Arts, B-1040 Brussels
Fax: 32-2-212 04 00

NOTES

[1]The G7 countries are: Germany, France, Italy, the United Kingdom, Canada, the United States and Japan. The President of the European Commission is invited to attend G7 summits.

[2]G24 comprises: the 12 Member States of the European Union, Austria, Finland, Iceland, Norway, Sweden, Switzerland, Turkey, the United States, Canada, Australia, Japan and New Zealand.

[3]Poland, Hungary, Albania, Bulgaria, Estonia, Lithuania, Latvia, the Czech Republic, the Slovak Republic, Romania and Slovenia.

[4]The following countries were involved: Albania, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, the Czech Republic and the Slovak Republic.

[5]The programmes concerned were: Environment, Biomedicine and health, Non-nuclear energy, Nuclear fission safety and Human capital and mobility.

[6]COST now has 25 members: the 12 Member States of the European Union, Austria, Switzerland, Iceland, Norway, Sweden, Finland, Turkey, Slovenia, Croatia, Hungary, Poland, the Czech Republic and the Slovak Republic.

[7]The NIS are: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Turkistan, Moldova, Russia, Tajikistan, Turkmenistan, the Ukraine and Uzbekistan.

—April, 1994